

State of California  
The Resources Agency

DEPARTMENT OF WATER RESOURCES  
Division of Operations and Maintenance

# STATE WATER PROJECT OPERATIONS DATA

For the month of:  
**September 2003**

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Governor  
**State of California**

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**The Resources Agency**

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State of California  
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## **MONTHLY HIGHLIGHTS**

The following highlights are activities or actions that impacted State Water Project operations during the month of September 2003.

Statewide precipitation was 110 percent of average for the 2002-2003 water year as of September 30. September 30 marks the end of the operational water year. Statewide runoff was 100 percent of average for the water year. Precipitation percentages are used in this report to express historical and regional comparisons. Additional and more specific information is available via the internet at: <http://cdec.water.ca.gov/snow-rain.html>.

On September 30, total storage in major SWP reservoirs was about 3.61 MAF, compared with about 2.47 MAF at this time in 2002. The average storage in the major SWP reservoirs at the end of September was about 3.33 MAF. The September 30 storage at Lake Oroville was about 2.29 MAF as compared to 1.4 MAF at this time last year. The State's share of San Luis Reservoir storage was about 653 TAF, as compared with 401 TAF at this time last year. On September 30, the combined storage in our southern reservoirs was about 664 TAF, compared with about 663 TAF at this time last year.

Through September, SWP water deliveries for 2003 were about 2.65 MAF. This is a combination of project, transfer, and exchange waters. This is 121 TAF more than was delivered during the same period in 2002.

There were no constraints on the diversions other than physical capacity. For most of the month SWP targeted 7,180 cfs at Clifton Court Forebay and operated in compliance with outflow standards. During the final week of the water year, SWP exports were reduced to less than an average of 6,000 cfs for salinity management and to maintain compliance with the 7-day outflow standard. In addition, the export to inflow ratio standard was relaxed to move Environmental Water Account supplies.

**Table 1. Antelope Lake**

Daily Operation

(in acre-feet except as noted)

Capacity: 22,566 ac-ft

**September 2003**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Outflow in cfs					Computed Inflow (cfs)	
				Regulated Release			Spill	Estimated Evaporation And Seepage		
				Stream-flow Maint.	Water Supply Contract	Water Right				
Aug 31	4998.22	19,200								
1	4998.16	19,149	-51	20	0	0	0	7	27	
2	4998.11	19,107	-42	20	0	0	0	4	24	
3	4998.06	19,065	-42	20	0	0	0	4	24	
4	4998.00	19,014	-51	20	0	0	0	7	27	
5	4997.94	18,963	-51	20	0	0	0	7	27	
6	4997.87	18,905	-58	20	0	0	0	9	29	
7	4997.80	18,846	-59	20	0	0	0	10	30	
8	4997.74	18,795	-51	20	0	0	0	7	27	
9	4997.68	18,745	-50	20	0	0	0	7	27	
10	4997.61	18,687	-58	20	0	0	0	9	29	
11	4997.56	18,645	-42	20	0	0	0	7	27	
12	4997.50	18,595	-50	20	0	0	0	7	27	
13	4997.43	18,537	-58	20	0	0	0	9	29	
14	4997.38	18,495	-42	20	0	0	0	3	23	
15	4997.32	18,446	-49	20	0	0	0	6	26	
16	4997.24	18,380	-66	20	0	0	0	13	33	
17	4997.17	18,322	-58	20	0	0	0	9	29	
18	4997.12	18,281	-41	20	0	0	0	3	23	
19	4997.06	18,231	-50	20	0	0	0	8	28	
20	4997.01	18,190	-41	20	0	0	0	8	28	
21	4996.95	18,141	-49	20	0	0	0	8	28	
22	4996.90	18,100	-41	20	0	0	0	8	28	
23	4996.84	18,051	-49	20	0	0	0	8	28	
24	4996.79	18,010	-41	20	0	0	0	7	27	
25	4996.72	17,953	-57	20	0	0	0	9	29	
26	4996.66	17,904	-49	20	0	0	0	8	28	
27	4996.60	17,855	-49	20	0	0	0	8	28	
28	4996.54	17,807	-48	20	0	0	0	8	28	
29	4996.48	17,758	-49	20	0	0	0	8	28	
30	4996.42	17,709	-49	20	0	0	0	8	28	
Total cfs-days				---	600	0	0	0	224	
Total ac-ft				-1,491	1,190	0	0	0	444	
									1,634	
									143	

**Table 2. Frenchman Lake**

Daily Operation  
(in acre-feet except as noted)

Capacity: 55,477 ac-ft

**September 2003**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Outflow in cfs						Computed Inflow (cfs)	
				Regulated Release			Spill	Estimated Evaporation And Seepage	Total Outflow		
				Stream-flow Maint.	Water Supply Contract	Water Right					
Aug 31	5566.10	27,247									
1	5566.07	27,216	-31	0	7	0	0	9	16	0	
2	5566.04	27,186	-30	0	7	0	0	9	16	1	
3	5566.01	27,156	-30	0	10	0	0	9	19	4	
4	5565.97	27,115	-41	0	12	0	0	9	21	0	
5	5565.93	27,075	-40	0	12	0	0	9	21	1	
6	5565.89	27,035	-40	0	12	0	0	9	21	1	
7	5565.85	26,994	-41	0	12	0	0	9	21	0	
8	5565.81	26,954	-40	0	12	0	0	9	21	1	
9	5565.77	26,914	-40	0	12	0	0	9	21	1	
10	5565.73	26,874	-40	0	12	0	0	9	21	1	
11	5565.69	26,833	-41	0	12	0	0	9	21	0	
12	5565.65	26,793	-40	0	11	0	0	9	20	0	
13	5565.61	26,753	-40	0	11	0	0	10	21	1	
14	5565.57	26,713	-40	0	11	0	0	10	21	1	
15	5565.51	26,653	-60	0	19	0	0	11	30	0	
16	5565.45	26,593	-60	0	20	0	0	10	30	0	
17	5565.40	26,543	-50	0	18	0	0	7	25	0	
18	5565.34	26,484	-59	0	18	0	0	12	30	0	
19	5565.30	26,444	-40	0	11	0	0	9	20	0	
20	5565.27	26,414	-30	0	6	0	0	9	15	0	
21	5565.24	26,384	-30	0	6	0	0	9	15	0	
22	5565.21	26,354	-30	1	5	0	0	9	15	0	
23	5565.18	26,325	-29	1	5	0	0	10	16	1	
24	5565.15	26,295	-30	1	5	0	0	10	16	1	
25	5565.11	26,255	-40	1	7	0	0	12	20	0	
26	5565.07	26,216	-39	1	8	0	0	11	20	0	
27	5565.04	26,186	-30	1	8	0	0	6	15	0	
28	5565.00	26,146	-40	1	8	0	0	11	20	0	
29	5564.96	26,107	-39	1	6	0	0	13	20	0	
30	5564.93	26,077	-30	1	5	0	0	11	17	2	
Total cfs-days				- - -	9	308	0	0	288	605	16
Total ac-ft				-1,170	18	611	0	0	572	1,201	31

**Table 3. Lake Davis**

Daily Operation  
(in acre-feet except as noted)

Capacity: 84,371 ac-ft

**September 2003**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Outflow in cfs					Computed Inflow (cfs)	
				Regulated Release			Spill	Estimated Evaporation And Seepage		
				Stream-flow Maint.	Water Supply Contract	Water Right				
Aug 31	5765.62	51,154								
1	5765.60	51,093	-61	10	0	0	0	22	32	
2	5765.58	51,032	-61	10	0	0	0	22	32	
3	5765.56	50,971	-61	10	0	0	0	22	32	
4	5765.54	50,911	-60	10	0	0	0	22	32	
5	5765.51	50,820	-91	10	0	0	0	37	47	
6	5765.49	50,759	-61	10	0	0	0	22	32	
7	5765.47	50,699	-60	10	0	0	0	21	31	
8	5765.45	50,638	-61	10	0	0	0	22	32	
9	5765.43	50,578	-60	10	0	0	0	21	31	
10	5765.41	50,517	-61	10	0	0	0	22	32	
11	5765.39	50,457	-60	10	0	0	0	21	31	
12	5765.37	50,397	-60	10	0	0	0	21	31	
13	5765.35	50,336	-61	10	0	0	0	22	32	
14	5765.32	50,246	-90	10	0	0	0	35	45	
15	5765.30	50,186	-60	10	0	0	0	21	31	
16	5765.28	50,126	-60	10	0	0	0	21	31	
17	5765.26	50,065	-61	10	0	0	0	22	32	
18	5765.24	50,006	-59	10	0	0	0	21	31	
19	5765.22	49,945	-61	10	0	0	0	22	32	
20	5765.20	49,885	-60	10	0	0	0	20	30	
21	5765.18	49,826	-59	10	0	0	0	21	31	
22	5765.15	49,736	-90	10	0	0	0	35	45	
23	5765.13	49,676	-60	10	0	0	0	21	31	
24	5765.11	49,616	-60	10	0	0	0	21	31	
25	5765.09	49,557	-59	10	0	0	0	21	31	
26	5765.07	49,497	-60	10	0	0	0	20	30	
27	5765.05	49,437	-60	10	0	0	0	20	30	
28	5765.02	49,348	-89	9	0	1	0	35	45	
29	5765.00	49,289	-59	9	0	1	0	20	30	
30	5764.98	49,226	-63	9	0	1	0	22	32	
Total cfs-days			---	297	0	3	0	695	995	
Total ac-ft			-1,928	588	0	7	0	1,378	1,973	
									45	

**Table 4. Lake Oroville**

Daily Operation

(in acre-feet except as noted)

Capacity: 3,537, 580 ac-ft

**September 2003**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Outflow					Inflow	
				Hyatt Powerplant Generation 1/	Palermo Canal	Evaporation 2/	Spill	Total Outflow	Hyatt Powerplant Pumpback	Computed Inflow 3/
Aug 31	822.68	2,458,192								
	1	821.95	2,449,277	-8,915	13,460	29	322	0	13,811	0
	2	821.03	2,438,074	-11,203	16,417	29	362	0	16,808	0
	3	820.20	2,427,998	-10,076	15,094	29	377	0	15,500	0
	4	819.50	2,419,526	-8,472	14,247	29	221	0	14,497	0
	5	818.61	2,408,787	-10,739	14,620	29	236	0	14,885	0
	6	818.04	2,401,927	-6,860	10,213	29	260	0	10,502	0
	7	817.51	2,395,560	-6,367	10,151	29	243	0	10,423	0
	8	816.65	2,385,254	-10,306	14,803	30	129	0	14,962	0
	9	815.89	2,376,171	-9,083	13,626	30	186	0	13,842	0
	10	815.04	2,366,042	-10,129	14,607	30	177	0	14,814	0
	11	814.10	2,354,876	-11,166	15,632	30	321	0	15,983	0
	12	813.23	2,344,573	-10,303	16,019	30	280	0	16,329	0
	13	812.88	2,340,437	-4,136	8,124	30	399	0	8,553	0
	14	812.74	2,338,784	-1,653	6,333	30	534	0	6,897	0
	15	812.36	2,334,302	-4,482	9,532	30	303	0	9,865	0
	16	812.07	2,330,885	-3,417	9,884	30	214	0	10,128	0
	17	811.43	2,323,356	-7,529	10,341	30	182	0	10,553	0
	18	811.03	2,318,660	-4,696	10,346	30	332	0	10,708	0
	19	810.62	2,313,852	-4,808	8,913	30	340	0	9,283	0
	20	810.71	2,314,907	1,055	3,692	30	309	0	4,031	0
	21	810.74	2,315,259	352	4,126	30	356	0	4,512	0
	22	810.32	2,310,339	-4,920	8,467	30	340	0	8,837	0
	23	809.74	2,303,558	-6,781	9,074	30	388	0	9,492	0
	24	809.48	2,300,523	-3,035	6,475	30	252	0	6,757	0
	25	809.16	2,296,790	-3,733	7,476	30	196	0	7,702	0
	26	808.96	2,294,460	-2,330	8,186	30	157	0	8,373	0
	27	809.08	2,295,858	1,398	2,747	30	134	0	2,911	0
	28	808.93	2,294,111	-1,747	6,369	30	189	0	6,588	0
	29	808.48	2,288,874	-5,237	7,156	30	165	0	7,351	0
	30	808.04	2,283,761	-5,113	7,855	30	196	0	8,081	0
<b>Total</b>				<b>-174,431</b>	<b>303,985</b>	<b>893</b>	<b>8,100</b>	<b>0</b>	<b>312,978</b>	<b>0</b>
1/ Includes bypass flows										
2/ Evaporation will be zero for days when there is precipitation or heavy overcast.										
3/ Does not include pumpback.										

**Table 5. Thermalito Forebay  
Including Diversion Pool and Power Canal**

Daily Operation

(in acre-feet except as noted)

**September 2003**

Capacity: 25,120 ac-ft

Date	Storage 1/	Storage Change	Inflow			Outflow					Losses (-) And Gains (+)
			Lake Oroville Releases 2/	Kelly Ridge Generation	Thermalito Pumping- Generating Plant Pumpback	Thermalito Pumping- Generating Plant Generation 3/	Butte County 4/	Thermalito Irrigation District	Releases To River 5/	Hyatt Powerplant Pumpback	
Aug 31	24,017										
1	23,702	-315	13,460	506	0	13,263	2	10	1,251	0	245
2	23,795	93	16,417	504	0	15,623	2	10	1,251	0	58
3	24,064	269	15,094	516	0	14,210	2	10	1,257	0	138
4	23,322	-742	14,247	474	320	14,720	2	10	1,263	0	212
5	23,644	322	14,620	508	0	13,591	2	10	1,263	0	60
6	23,965	321	10,213	502	0	9,532	2	10	1,269	0	419
7	24,007	42	10,151	500	0	9,585	2	10	1,265	0	253
8	22,955	-1,052	14,803	514	0	15,185	2	10	1,265	0	93
9	24,171	1,216	13,626	510	0	11,789	2	10	1,265	0	146
10	23,958	-213	14,607	506	0	14,208	2	10	1,267	0	161
11	23,269	-689	15,632	500	0	15,654	2	10	1,247	0	92
12	23,266	-3	16,019	506	0	15,421	2	10	1,251	0	156
13	24,017	751	8,124	506	0	6,552	2	10	1,249	0	-66
14	24,173	156	6,333	506	0	5,329	2	10	1,257	0	-85
15	24,125	-48	9,532	506	0	8,879	2	10	1,245	0	50
16	23,889	-236	9,884	512	0	9,392	2	10	1,253	0	25
17	23,972	83	10,341	510	0	9,478	2	10	1,253	0	-25
18	23,948	-24	10,346	460	0	9,698	2	10	1,251	0	131
19	23,901	-47	8,913	504	0	8,221	3	10	1,241	0	11
20	23,810	-91	3,692	476	0	2,842	3	10	1,241	0	-163
21	23,691	-119	4,126	516	0	3,340	3	10	1,253	0	-155
22	23,621	-70	8,467	492	0	7,739	3	10	1,251	0	-26
23	23,797	176	9,074	516	0	8,178	3	10	1,249	0	26
24	24,092	295	6,475	474	0	5,573	3	10	1,277	0	209
25	23,622	-470	7,476	502	0	7,164	3	10	1,249	0	-22
26	23,758	136	8,186	335	0	7,106	3	10	1,253	0	-13
27	23,611	-147	2,747	383	0	1,931	3	10	1,249	0	-84
28	23,777	166	6,369	490	0	5,360	3	10	1,249	0	-71
29	23,668	-109	7,156	446	0	6,132	3	10	1,251	0	-315
30	23,907	239	7,855	10	0	6,387	3	11	1,245	0	20
Total		-110	303,985	14,190	320	282,082	72	301	37,630	0	1,480

1/ Sum of Thermalito Forebay and Diversion Pool.

2/ Sum of releases from Lake Oroville through Hyatt plant, and spill.

3/ Includes Bypass flows at Thermalito.

4/ Includes 5 AF of entitlement water to Del Oro WD, 1 AF of recreation

water to Lime Saddle Marina, and 66 AF to Cal Water.

5/ The sum of the flows from fish barrier dam and the fish hatchery.

**Table 6. Thermalito Afterbay**

Daily Operation

(in acre-feet except as noted)

Capacity: 57,040 ac-ft

**September 2003**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow	Outflow						Losses (-) and Gains (+)	Total Releases to River 2/	
				Thermalito Pumping-Generating Plant Generation 1/	Sutter Butte Canal	Western Canal Lateral	Richvale Canal	Western Canal	Afterbay River Outlet	Thermalito Pumping-Generating Plant Pumpback			
Aug 31	131.70	38,034											
	1	131.48	37,247	-787	13,263	2,618	30	534	1,109	9,679	0	-80	10,930
	2	131.87	38,647	1,400	15,623	2,598	28	533	1,057	9,719	0	-288	10,970
	3	131.92	38,829	182	14,210	2,520	26	532	1,008	9,738	0	-204	10,995
	4	131.99	39,083	254	14,720	2,499	18	532	962	9,738	320	-397	11,001
	5	131.93	38,865	-218	13,591	2,520	12	532	916	9,738	0	-91	11,001
	6	130.66	34,380	-4,485	9,532	2,519	12	476	887	9,739	0	-384	11,008
	7	129.35	30,025	-4,355	9,585	2,479	10	454	887	9,739	0	-371	11,004
	8	129.72	31,227	1,202	15,185	2,420	9	454	861	9,739	0	-500	11,004
	9	129.26	29,737	-1,490	11,789	2,261	9	432	752	9,739	0	-86	11,004
	10	129.53	30,607	870	14,208	2,162	8	387	601	9,719	0	-461	10,986
	11	130.62	34,243	3,636	15,654	2,023	6	375	476	8,727	0	-411	9,974
	12	131.97	39,011	4,768	15,421	1,984	5	353	440	7,716	0	-155	8,967
	13	131.08	35,835	-3,176	6,552	1,960	6	296	438	6,704	0	-324	7,953
	14	130.17	32,719	-3,116	5,329	1,938	5	276	442	5,752	0	-32	7,009
	15	130.25	32,987	268	8,879	1,922	5	248	405	5,752	0	-279	6,997
	16	130.51	33,867	880	9,392	1,918	5	188	393	5,752	0	-256	7,005
	17	130.86	35,069	1,202	9,478	1,853	3	171	351	5,752	0	-146	7,005
	18	131.24	36,396	1,327	9,698	1,789	0	167	333	5,712	0	-370	6,963
	19	131.53	37,425	1,029	8,221	1,769	0	169	294	4,741	0	-219	5,982
	20	130.36	33,358	-4,067	2,842	1,757	0	145	270	4,741	0	4	5,982
	21	129.20	29,545	-3,813	3,340	1,757	0	135	269	4,741	0	-251	5,994
	22	129.39	30,154	609	7,739	1,706	0	139	275	4,721	0	-289	5,972
	23	130.10	32,485	2,331	8,178	1,585	0	119	275	3,729	0	-139	4,978
	24	129.98	32,085	-400	5,573	1,555	0	95	275	3,729	0	-319	5,006
	25	130.38	33,426	1,341	7,164	1,503	0	93	248	3,729	0	-250	4,978
	26	130.81	34,896	1,470	7,106	1,478	0	71	212	3,729	0	-146	4,982
	27	129.68	31,096	-3,800	1,931	1,412	0	63	196	3,729	0	-331	4,978
	28	129.63	30,933	-163	5,360	1,398	0	61	186	3,729	0	-149	4,978
	29	129.82	31,556	623	6,132	1,428	0	67	188	3,729	0	-97	4,980
	30	130.06	32,351	795	6,387	1,369	0	73	264	3,729	0	-157	4,974
Total				-5,683	282,082	58,700	197	8,170	15,270	197,930	320	-7,178	235,560

1/ Includes Bypass flows at Thermalito.

2/ The sum of the flows from the fish barrier dam, fish hatchery, and afterbay river outlet.

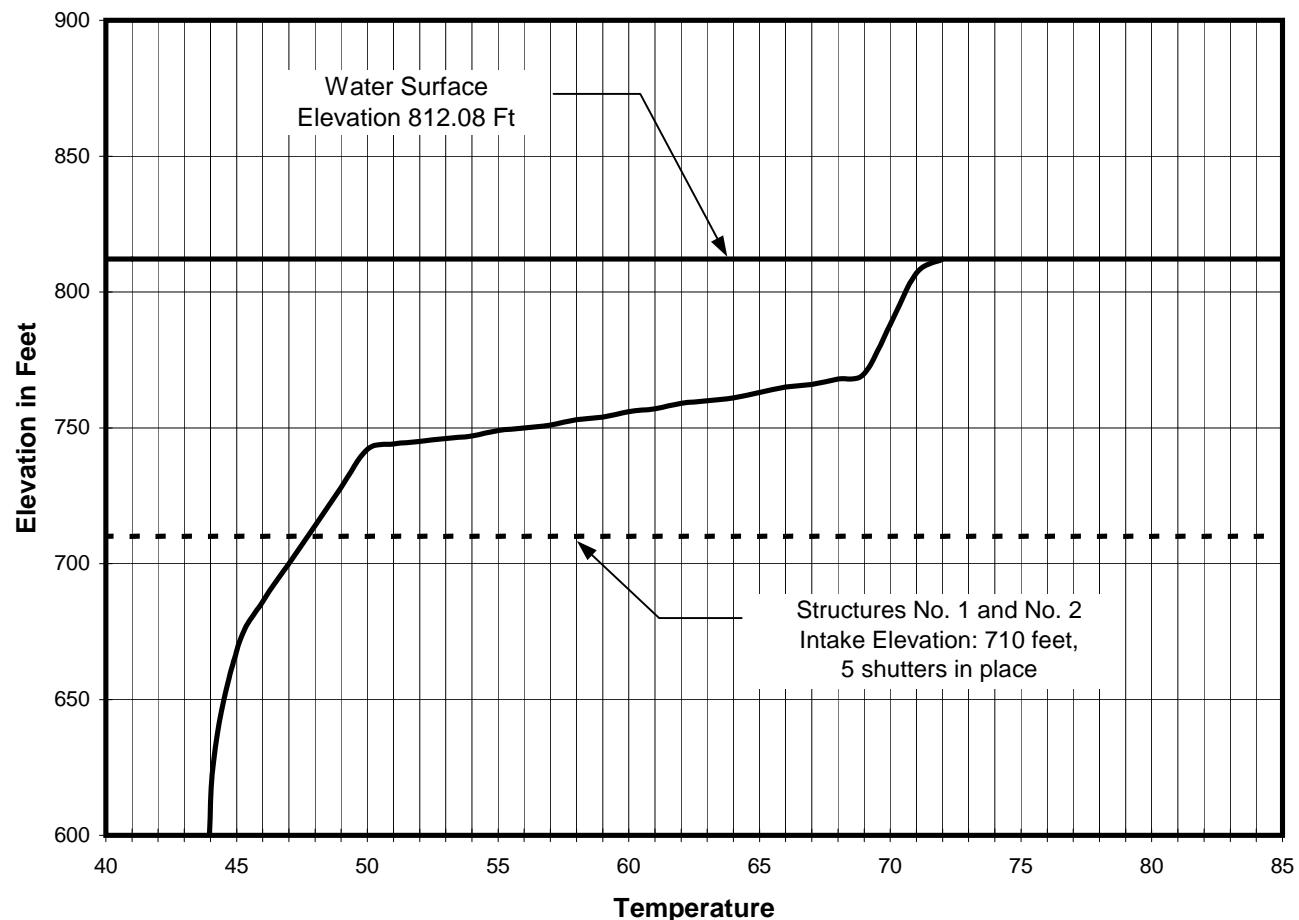
**Table 7. Oroville-Thermalito Complex**

Water Temperature Data

(in degrees Fahrenheit)

September 2003

Date	Mean Daily Temperature	
	Thermalito Afterbay Outlet	Fish Hatchery
1	61	54
2	61	54
3	60	54
4	59	53
5	59	53
6	59	51
7	59	51
8	58	51
9	57	52
10	57	52
11	57	52
12	57	52
13	58	53
14	59	54
15	59	54
16	59	54
17	60	54
18	60	52
19	61	51
20	62	51
21	62	52
22	63	52
23	62	52
24	60	52
25	60	52
26	61	52
27	61	52
28	61	52
29	61	52
30	62	52

**Lake Oroville Temperature Profile  
on September 17, 2003**

Note: Water surface elevations on Table 4 are taken at Oroville Dam at midnight and may differ slightly from those shown on this table which are normally taken at mid-day and upstream from Oroville Dam.

**Table 8. North Bay Aqueduct**  
Delta Field Division, Monthly Deliveries

(In acre-feet)

**September 2003**

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries				
	Beginning and Ending					Table A Amount		Permit		
	No.	Structure	Mile			M & I	Benicia			
1	1	Barker Slough Pumping Plant	0.17	(Into the North Bay Aqueduct)	4,614	314	362	26		
		Travis Surge Tank	8.78							
			8.80	Solano County Water Agency Travis Turnout	340					
			10.54	Solano County Water Agency Fairfield / Vacaville 24"	362					
				Solano County Water Agency Fairfield / Vacaville 42"	1,123					
			17.00	Solano County Water Agency Central Solano	Stub					
2	3A	Cordelia Forebay	21.23			646	1,086			
		Cordelia Pumping Plant & Cordelia Spillway	21.30		2,405					
		Napa Pipeline	21.33	Solano County Water Agency Vallejo	646					
3B	2	Cordelia Surge Tank	23.33			5	461			
		Creston Surge Tank Connection	25.65							
			26.95	Napa County Flood Control & WCD American Canyon 2	5					
			27.27	Napa County Flood Control & WCD American Canyon 3	0					
		Napa Terminal Tank	27.58	City of Napa	461					
			27.60	Napa County Flood Control & WCD American Canyon 1	207					

**Table 9. Delta Field Division Plant Data**

(in acre-feet)

**September 2003**

Date	North Bay Aqueduct		California Aqueduct		South Bay Aqueduct			
	Barker Slough Pumping Plant	Cordelia Pumping Plant	Banks Pumping Plant		South Bay Pumping Plant	Del Valle Pumping Plant		
			Total	SWP		Into Lake	Into Aqueduct	Gravity Flow Through Plant Into Aqueduct
1	160	92	13,812	13,812	569	0	0	31
2	174	99	13,701	13,701	559	0	0	58
3	164	88	13,899	13,899	466	0	0	161
4	171	83	13,827	13,827	397	0	0	215
5	152	74	13,885	13,885	381	0	0	215
6	122	61	13,985	13,985	381	0	0	215
7	141	70	14,006	14,006	373	0	0	215
8	159	87	13,846	13,846	361	0	0	215
9	156	94	13,968	13,968	361	0	0	215
10	159	92	13,879	13,879	352	0	0	258
11	170	74	14,855	14,855	346	0	0	256
12	192	76	13,844	13,844	381	0	0	249
13	159	70	14,266	14,266	381	0	0	254
14	145	77	14,261	14,261	402	0	0	225
15	143	74	13,774	13,774	484	0	0	163
16	141	74	13,809	13,809	568	0	0	67
17	134	75	13,911	13,911	558	0	0	39
18	174	77	13,309	13,309	558	0	0	80
19	151	79	13,978	13,978	552	0	0	122
20	142	71	14,002	14,002	463	0	0	160
21	146	72	14,341	14,341	411	0	0	188
22	161	85	13,913	13,213	436	0	0	188
23	171	96	13,719	13,019	422	0	0	250
24	172	104	12,239	11,539	411	0	0	249
25	187	83	11,343	10,643	453	0	0	245
26	167	82	11,588	10,888	446	0	0	238
27	140	80	11,435	10,735	424	0	105	134
28	122	59	11,367	11,367	418	0	245	0
29	107	72	10,805	10,105	428	0	244	0
30	132	85	10,229	9,529	559	0	13	19
Total	4,614	2,405	399,796	394,196	13,301	0	607	4,924

**Table 10. Clifton Court Forebay**

Daily Operation of Gates

**September 2003**

Date	Time										Amount of inflow in Acre-Feet
	Opened	Closed									
1	---	2:30	5:30	9:00	10:30	21:15	22:45	---			14,215
2	---	3:45	7:00	10:15	11:45	22:00	23:30	---			14,003
3	---	5:15	8:15	11:45	13:15	22:45					14,159
4	0:15	6:30	10:20	13:15	14:45	23:45					14,105
5	1:15	7:15	10:45	14:45	16:15	---					13,979
6	---	1:00	2:30	8:45	12:45	15:45	17:15	---			13,906
7	---	2:00	3:30	9:30	14:45	---					13,955
8	---	3:00	4:30	10:15	14:40	17:15	18:45	---			13,434
9	---	4:00	5:30	11:00	14:44	17:45	19:15	---			14,069
10	---	4:44	6:15	11:30	15:42	18:15	19:45	---			13,737
11	---	5:30	7:00	11:45	15:00	18:45	20:15	---			13,858
12	---	6:15	8:00	12:15	15:15	19:15	20:45	---			14,085
13	---	7:00	8:30	12:30	15:30	19:30	21:00	---			14,234
14	---	1:15	4:15	7:45	9:15	20:00	21:30	---			14,125
15	---	2:00	5:00	8:45	10:15	20:15					14,173
16	0:01	3:00	6:00	9:45	11:15	20:45					14,198
17	0:01	4:00	7:00	11:00	12:30	21:15	22:45	---			14,227
18	---	5:20	9:30	12:30	14:00	22:15	23:45	---			14,203
19	---	6:00	10:28	13:45	15:15	23:00					14,220
20	0:30	7:15	11:25	14:45	16:15	---					14,188
21	---	0:15	1:45	8:00	12:18	15:30	17:00	---			14,132
22	---	1:30	3:02	9:00	13:00	16:15	17:45	---			13,504
23	---	2:30	4:00	9:45	13:10	16:45	18:15	---			14,077
24	---	3:30	5:08	10:15	14:09	17:15	18:45	22:02			12,492
25	0:01	4:30	6:00	10:45	15:10	17:30	19:00	22:44			11,499
26	0:01	5:30	7:50	11:15	15:00	18:00	19:30	23:30			11,777
27	2:30	6:15	7:45	18:30	20:00	23:20					12,094
28	0:01	0:30	4:08	7:15	8:45	13:25	15:47	19:00	20:30	---	11,661
29	---	1:30	5:15	8:15	9:47	19:45	21:15	---			10,870
30	---	2:45	6:35	9:30	11:00	20:30	22:00	---			10,466

Total inflow for the month in AF: 403,645

**Table 11. Governor Edmund G. Brown California Aqueduct**

Delta Field Division, Monthly Deliveries

(In acre-feet)

**September 2003**

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries						
	Beginning and Ending					Table A Amount	USBR	Local	Loan Water	Dry Year Purchase		
	No.	Structure	Mile									
1		Banks Pumping Plant	3.32		399,796							
2A	1	South Bay Pumping Plant	4.49	Bethany Reservoir Inlet	13,301	74	74	74	74	74		
		Check No. 1	5.95									
		Check No. 2	12.01									
	3		12.47	Musco Olive	74							
		Check No. 3	18.29									
	4		22.16	Tracy Golf & Country Club	0							
		Check No. 4	23.99									
	5	Check No. 5	29.73									
	6	Check No. 6	34.24									
	7		35.22	Turlock Fruit Company Inflow	0							
		Check No. 7	39.91									
2B	8		42.46	Oak Flat Water District-A	28	28	107	240	74	74		
			42.9	Western Hills WD	107							
			43.81	Oak Flat Water District-B	240							
			44.64	Oak Flat Water District-C	74							
		Check No. 8	45.97									
	9		46.18	Oak Flat Water District-D	74	74	0	0	0	0		
				Oak Flat Totals:	416							
	10	Check No. 9	51.3									
	11	Check No. 10	56.86									
	12	Check No. 11	61.4									
			66.14	Veteran's Cemetery	15		15	15	15	15		
		Check No. 12	66.71		355,571							

**Table 12. South Bay Aqueduct**  
Delta Field Division, Monthly Deliveries

(In acre-feet)

**September 2003**

Reach No.	Operating Pool			Turnout	Total Diver-sions	Deliveries					
	Beginning and Ending		No.			Table A Amount	Purchase Pool A	Transfer	Local	Recre-ation	
	No.	Structure	Mile								
1	1	South Bay Pumping Plant	0.00	(into South Bay Aqueduct)	13,301	4	766	1/ 500			
			3.17	Granite - Vasco Rd. (Temp.)	0						
			3.18	Oakland Scavenger Zone 7	4						
	2	Check No. 1	3.91								
2	3		7.21	Zone 7 Altamont	0	766	195	52	16		
		Check No. 3	9.49	Zone 7 Patterson Inflow Exchange	0						
				Zone 7 Patterson Project Water	1,266						
4	6	Check No. 4	10.68			916	916	916	916		
		Check No. 5	12.29								
			13.55	Zone 7 Wente #1	195						
			14.16	Zone 7 Wente #2	52						
			14.31	Ising Project Water	16						
	7	Check No. 6	14.65			262	262	262	262		
			14.78	Zone 7 Arroyo Mocho Project Water	916						
		Check No. 7	16.38								
			16.57	Zone 7 Wente #3	0						
			16.69	Zone 7 Norman Nursery	9						
5	8		16.70	Zone 7 Concannon Project Water	38	2,025	2,025	2,025	2,025		
				Zone 7 Wente #4	62						
		Del Valle Branch Pipeline Junction	18.63	(Pumped into Lake Del Valle)	0						
				(Flow into South Bay Aqueduct)	5,531						
				Arroyo Valle #1 & #2 Project Water	262						
		Deliveries through Del Valle Branch Pipeline		Arroyo Valle #1 & #2 Inflow Released	84						
				Lake Del Valle Recreation	20						
				Zone 7 Wente #5	102						
			19.20	So. Livermore Project	2,025						
				So. Livermore Storage Released	553						
6				So. Livermore Stored Exchanged	0	182	182	182	182		
			19.21	Zone 7 - Kalthrof Detjens	182						
7	La Costa Tunnel	22.50		ACWD Vallecitos Project Water	1,190	1,190	1,190	1,190	1,190		
		25.97		City of San Francisco San Antonio	0						
8	Mission Tunnel	28.97		ACWD - Bayside 1 & 2 Project Water:	2,281	2,281	2,281	2,281	2,281		
				Inflow Released	84						
				Inflow Exchange:	0						
9	Santa Clara Pipeline	35.86		S.C.V.W.D. Meter	9,656	9,656	9,656	9,656	9,656	9,656	

1/ Transfer water from Byron Bethany Irrigation District.

**Table 13. Lake Del Valle**

Daily Operation

Capacity: 77,106 ac-ft

September 2003

Date	Water Surface Elevation (feet)	Storage	Storage Change	Inflow		Outflow					Precipitation (inches)
				Natural 1/	From South Bay Aqueduct	Arroyo Valle	South Bay Aqueduct	Recreation Deliveries 2/	Evaporation	Total Outflow	
Aug 31 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	698.22	36,621									
	698.16	36,581	-40	4	0	0	31	0	13	44	0.00
	698.07	36,521	-60	12	0	0	58	0	14	72	0.00
	697.80	36,340	-181	-6	0	0	161	0	14	175	0.00
	697.40	36,074	-266	-37	0	0	215	0	14	229	0.00
	697.07	35,855	-219	7	0	0	215	0	11	226	0.00
	696.70	35,610	-245	-23	0	0	215	0	7	222	0.00
	696.35	35,380	-230	-7	0	0	215	0	8	223	0.00
	695.98	35,136	-244	-17	0	0	215	0	12	227	0.00
	695.59	34,883	-253	-26	0	0	215	0	12	227	0.00
	695.23	34,650	-233	30	0	0	258	0	5	263	0.00
	694.86	34,412	-238	32	0	0	256	1	13	270	0.00
	694.49	34,175	-237	25	0	0	249	1	12	262	0.00
	694.10	33,926	-249	22	0	0	254	1	16	271	0.00
	693.78	33,723	-203	39	0	0	225	1	16	242	0.00
	693.59	33,602	-121	59	0	0	163	1	16	180	0.00
	693.53	33,564	-38	47	0	0	67	1	17	85	0.00
	693.41	33,488	-76	-20	0	0	39	1	16	56	0.00
	693.34	33,444	-44	53	0	0	80	1	16	97	0.00
	693.10	33,293	-151	-12	0	0	122	1	16	139	0.00
	692.80	33,105	-188	-11	0	0	160	1	16	177	0.00
	692.41	32,861	-244	-40	0	0	188	1	15	204	0.00
	692.03	32,624	-237	-33	0	0	188	1	15	204	0.00
	691.64	32,383	-241	25	0	0	250	1	15	266	0.00
	691.26	32,149	-234	28	0	0	249	1	12	262	0.00
	690.88	31,916	-233	24	0	0	245	1	11	257	0.00
	690.53	31,703	-213	36	0	0	238	1	10	249	0.00
	690.15	31,472	-231	19	0	0	239	1	11	250	0.00
	689.75	31,231	-241	14	0	0	245	1	9	255	0.00
	689.35	30,991	-240	13	0	0	244	1	8	253	0.00
	689.13	30,859	-132	-90	0	0	32	1	9	42	0.00
Total				-5,762	168	0	5,531	20	379	5,930	0.00

1/ Total inflow from stream gaging station above Lang Canyon and accretions/depletions.

2/ To East Bay Regional Park District.

NR=No Records

**Table 14. Consolidated State-Federal O'Neill Forebay**

Daily Operations

**September 2003**

United States  
Department of the Interior  
Bureau of Reclamation  
Central Valley Project

State of California  
The Resources Agency  
Department of Water Resources  
State Water Project

Capacity 56,430 ac-ft

Date	Water Surface Elevation (in feet)	Storage (ac-ft)	Storage Change	Inflow (cfs)				Outflow (cfs)				Computed Losses (-) Gains (+) (cfs)	
				Pump In	O'Neill Pumping Generating Plant (Pumped)	Gianelli Pumping Generating Plant (Generation)	California Aqueduct	O'Neill Pumping Generating Plant (Generation)	Gianelli Pumping Generating Plant (Pumped)	Dos Amigos Pumping Plant	Deliveries 1/		
Aug 31	222.15	48,783											
1	222.70	50,246	1,463	0	1,682	1,080	6,210	0	2,435	6,323	21	545	
2	222.42	49,501	-745	0	1,448	1,075	6,070	0	2,707	6,224	21	-17	
3	221.95	48,255	-1,246	0	1,307	0	6,300	0	3,431	5,748	26	970	
4	222.35	49,314	1,059	0	1,277	1,874	6,195	0	4,048	5,294	14	544	
5	220.99	45,734	-3,580	0	1,326	0	6,333	0	3,509	6,895	14	954	
6	220.47	44,374	-1,360	0	1,491	0	6,177	0	1,623	7,574	14	857	
7	220.83	45,315	941	0	1,720	0	6,466	0	3,155	5,382	14	839	
8	222.10	48,650	3,335	0	1,548	0	6,516	0	1,893	5,332	14	856	
9	222.51	49,740	1,090	0	1,500	0	6,174	0	2,612	5,105	14	607	
10	221.30	46,547	-3,193	0	1,632	0	6,097	0	4,463	5,118	17	259	
11	221.00	45,760	-787	0	1,701	0	6,710	0	4,123	5,166	25	506	
12	220.30	43,931	-1,829	0	1,654	0	6,228	0	4,359	4,867	25	447	
13	220.40	44,192	261	0	1,631	0	6,108	0	3,529	4,974	25	921	
14	221.11	46,049	1,857	0	1,613	0	6,540	0	2,498	5,100	25	406	
15	221.82	47,914	1,865	0	900	0	6,278	0	2,408	4,396	27	593	
16	221.55	47,204	-710	0	0	96	6,286	0	2,676	4,394	9	339	
17	220.47	44,374	-2,830	0	305	222	5,711	0	3,733	4,366	9	443	
18	219.23	41,170	-3,204	0	1,102	150	5,929	0	4,259	5,045	4	512	
19	220.02	43,204	2,034	0	1,163	150	6,458	0	2,729	4,772	4	759	
20	222.11	48,677	5,473	0	1,282	0	6,322	0	533	4,692	4	384	
21	219.10	40,839	-7,838	0	1,396	0	6,082	0	6,703	5,222	4	499	
22	221.27	46,469	5,630	0	1,263	0	6,444	0	1,504	3,772	4	411	
23	220.90	45,498	-971	0	1,146	0	6,199	0	4,050	4,170	4	389	
24	220.49	44,427	-1,071	0	1,102	0	5,672	0	3,352	4,390	4	432	
25	220.05	43,282	-1,145	0	1,133	0	4,946	0	2,375	4,910	8	637	
26	219.62	42,170	-1,112	0	1,108	0	5,159	0	2,374	4,932	8	486	
27	220.10	43,411	1,241	0	1,257	0	5,317	0	1,407	5,073	8	540	
28	220.09	43,386	-25	0	1,341	0	5,007	0	2,110	4,518	8	275	
29	220.77	45,158	1,772	0	1,369	0	4,901	0	967	4,811	8	409	
30	220.87	45,420	262	0	1,276	0	4,427	0	1,583	4,288	11	311	
Total				-3,363	0	38,673	4,647	179,262	0	87,148	152,853	393	16,117
Mean cfs				---	0	1,289	155	5,975	0	2,905	5,095	13	537
Acre-feet				-3,363	0	76,711	9,219	355,571	0	172,855	303,186	779	31,956

1/ Includes 64 AF delivered to DFG at O'Neill Forebay and 16 AF to Parks and Recreation and 699 AF to SLWD.

**Table 15. Consolidated State-Federal San Luis Reservoir**

Daily Operations

**September 2003**

United States

Department of the Interior

Bureau of Reclamation

Central Valley Project

Capacity: 2,027,835 ac-ft

State of California

The Resources Agency

Department of Water Resources

State Water Project

Date	Water Surface Elev. (in feet)	Storage (ac-ft)	Storage Change (ac-ft)	Inflow (cfs)	Outflow (cfs)			Computed Losses (-) Gains (+) (cfs)
				Gianelli Pumping Generating Plant (Pumped)	Gianelli Pumping Generating Plant (Generation)	Pacheco Tunnel 1/	Parks and Rec. Del.	
Aug 31	430.71	787,480						
1	430.89	789,143	1,663	2,435	1,080	246	0	-271
2	431.19	791,916	2,773	2,707	1,075	268	0	34
3	431.87	798,216	6,300	3,431	0	100	0	-155
4	432.28	802,022	3,806	4,048	1,874	101	0	-154
5	432.98	808,535	6,513	3,509	0	100	0	-125
6	433.30	811,518	2,983	1,623	0	102	0	-17
7	433.90	817,121	5,603	3,155	0	102	0	-228
8	434.26	820,490	3,369	1,893	0	10	0	-184
9	434.77	825,270	4,780	2,612	0	0	0	-202
10	435.69	833,917	8,647	4,463	0	0	0	-104
11	436.53	841,838	7,921	4,123	0	0	0	-130
12	437.41	850,164	8,326	4,359	0	0	0	-161
13	438.12	856,902	6,738	3,529	0	0	0	-132
14	438.61	861,563	4,661	2,498	0	0	0	-148
15	439.09	866,137	4,574	2,408	0	113	0	11
16	439.57	870,719	4,582	2,676	96	10	0	-260
17	440.24	877,128	6,409	3,733	222	15	0	-265
18	441.05	884,898	7,770	4,259	150	48	0	-144
19	441.57	889,898	5,000	2,729	150	55	0	-3
20	441.63	890,476	578	533	0	55	0	-187
21	442.97	903,407	12,931	6,703	0	48	0	-136
22	443.26	906,214	2,807	1,504	0	36	0	-53
23	444.07	914,070	7,856	4,050	0	36	0	-53
24	444.66	919,806	5,736	3,352	0	42	0	-418
25	445.12	924,287	4,481	2,375	0	41	0	-75
26	445.59	928,873	4,586	2,374	0	41	0	-21
27	445.83	931,217	2,344	1,407	0	54	0	-171
28	446.22	935,032	3,815	2,110	0	54	0	-133
29	446.38	936,598	1,566	967	0	35	0	-142
30	446.65	939,243	2,645	1,583	0	149	1	-99
Total			151,763	87,148	4,647	1,861	1	-4,126
Mean cfs			---	2,905	155	62	0	-138
Acre-feet			151,763	172,855	9,219	3,699	1	-8,173

1/ Pacheco Tunnel, San Felipe Split; Santa Clara: 929 AF, San Benito: 2,770 AF.

**Table 16. San Luis Field Division Plant Data**

(in acre-feet)

**September 2003**

Date	Dos Amigos Pumping Plant		Gianelli Pumping - Generating Plant				San Felipe Project
	Total Pumping	SWP Pumping 1/	Total Generation	SWP Generation 1/	Total Pumping	SWP Pumping 1/	Federal
1	12,541	5,976	2,142	125	4,830	4,830	488
2	12,346	5,863	2,133	131	5,369	5,369	532
3	11,402	4,853	0	0	6,805	6,805	199
4	10,500	3,589	3,717	386	8,030	8,030	200
5	13,677	10,634	0	0	6,960	6,960	199
6	15,023	11,908	0	0	3,220	3,220	203
7	10,675	7,533	0	0	6,257	3,183	203
8	10,576	7,462	0	0	3,754	2,113	19
9	10,126	8,540	0	0	5,181	4,457	0
10	10,152	8,590	0	0	8,853	5,748	0
11	10,247	8,711	0	0	8,177	5,226	0
12	9,654	8,098	0	0	8,647	7,073	0
13	9,865	8,370	0	0	7,000	5,298	0
14	10,115	8,533	0	0	4,954	3,698	0
15	8,720	7,195	0	0	4,777	4,777	225
16	8,716	7,165	190	190	5,308	5,308	20
17	8,660	7,674	441	441	7,405	7,405	30
18	10,006	9,012	298	298	8,448	3,644	95
19	9,466	8,480	298	298	5,412	5,412	110
20	9,307	8,342	0	0	1,058	1,058	109
21	10,357	9,821	0	0	13,295	6,918	96
22	7,482	6,960	0	0	2,983	1,739	72
23	8,271	7,746	0	0	8,033	5,548	72
24	8,708	8,180	0	0	6,648	3,801	84
25	9,739	9,214	0	0	4,711	3,123	81
26	9,782	9,252	0	0	4,708	1,532	82
27	10,063	9,549	0	0	2,790	-23	108
28	8,962	8,445	0	0	4,185	-1	107
29	9,543	9,015	0	0	1,918	-30	70
30	8,505	7,979	0	0	3,139	-57	295
Total	303,186	242,689	9,219	1,869	172,855	122,164	3,699

1/ Negative values may appear in SWP columns and indicate a mismatch of scheduled CVP energy and actual pumping; adjustments to SWP water shares are made to balance the mismatch.

**Table 17. Consolidated State-Federal Los Banos Reservoir**

Daily Operations

September 2003

United States

Department of the Interior

Bureau of Reclamation

Central Valley Project

Capacity 34,560 ac-ft

State of California

The Resources Agency

Department of Water Resources

State Water Project

Date	Water Surface Elev. (in feet)	Storage (ac-ft)	Storage Change (ac-ft)	Estimated Inflow (cfs)	Estimated Outflow (cfs)		Computed Losses (-) Gains (+) (ac-ft)
					Spill	Outlet	
Aug 31	325.70	19,602					
1	325.75	19,625	23	12	0	0	-1
2	325.77	19,634	9	5	0	0	-1
3	325.76	19,630	-4	0	0	0	-4
4	325.70	19,602	-28	0	0	0	-28
5	325.62	19,566	-36	0	0	0	-36
6	325.54	19,529	-37	0	0	0	-37
7	325.53	19,525	-4	0	0	0	-4
8	325.50	19,511	-14	0	0	0	-14
9	325.50	19,511	0	0	0	0	0
10	325.52	19,520	9	5	0	0	-1
11	325.55	19,534	14	7	0	0	0
12	325.60	19,557	23	12	0	0	-1
13	325.60	19,557	0	0	0	0	0
14	325.61	19,561	4	2	0	0	0
15	325.56	19,538	-23	0	0	0	-23
16	325.50	19,511	-27	0	0	0	-27
17	325.45	19,488	-23	0	0	0	-23
18	325.44	19,484	-4	0	0	0	-4
19	325.48	19,502	18	9	0	0	0
20	325.49	19,507	5	3	0	0	-1
21	325.51	19,516	9	5	0	0	-1
22	325.53	19,525	9	5	0	0	-1
23	325.53	19,525	0	0	0	0	0
24	325.39	19,461	-64	0	0	0	-64
25	325.35	19,443	-18	0	0	0	-18
26	325.35	19,443	0	0	0	0	0
27	325.35	19,443	0	0	0	0	0
28	325.33	19,434	-9	0	0	0	-9
29	325.33	19,434	0	0	0	0	0
30	325.36	19,447	13	7	0	0	0
Total			-155	72	0	0	-298
Mean cfs			---	2	0	0	---
Acre-feet			-155	143	0	0	-298

**Table 18. Consolidated State-Federal Little Panoche Reservoir**

Daily Operations

September 2003

United States

Department of the Interior

Bureau of Reclamation

Central Valley Project

Capacity: 5,580 ac-ft

State of California

The Resources Agency

Department of Water Resources

State Water Project

Date	Water Surface Elev. (in feet)	Storage (ac-ft) 1/	Storage Change (ac-ft) 1/	Estimated Inflow (cfs)	Estimated Outflow (cfs)		Computed Losses (-) Gains (+) (ac-ft) 1/
					Spill	Outlet	
Aug 31	600.00	684					
1	600.00	684	0		0	0	0
2	599.95	681	-3		0	0	-3
3	Not Observed				0	0	
4	Not Observed				0	0	
5	599.95	681	0		0	0	0
6	599.95	681	0		0	0	0
7	599.95	681	0		0	0	0
8	Not Observed				0	0	
9	599.95	681	0		0	0	0
10	599.80	674	-7		0	0	-7
11	599.80	674	0		0	0	0
12	599.75	671	-3		0	0	-3
13	599.75	671	0		0	0	0
14	599.70	669	-2		0	0	-2
15	599.75	671	2	1	0	0	0
16	Not Observed				0	0	
17	599.70	669	-2		0	0	-2
18	599.70	669	0		0	0	0
19	599.65	666	-3		0	0	-3
20	599.65	666	0		0	0	0
21	599.65	666	0		0	0	0
22	599.60	664	-2		0	0	-2
23	599.60	664	0		0	0	0
24	Not Observed				0	0	
25	599.55	661	-3		0	0	-3
26	Not Observed				0	0	
27	Not Observed				0	0	
28	Not Observed				0	0	
29	599.55	661	0		0	0	0
30	599.60	664	3	2	0	0	-1
Total			-20	3	0	0	-26
Mean cfs			---	2	0	0	---
Acre-feet			-20	6	0	0	-26

1/ Not available on a daily basis

**Table 19a. Governor Edmund G. Brown California Aqueduct**

San Luis Field Division, Monthly Deliveries

(In acre-feet)

**September 2003**

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries					
	Beginning and Ending					USBR	Transfer	DWR Recreation	USBR Recreation		
	No.	Structure	Mile								
2B	12	Check No. 12	66.71		355,571						
3A		San Luis Reservoir		Department of Parks and Recreation	1	929	2,770	1	0		
				San Felipe Division Santa Clara Water District	929						
				San Felipe Division San Benito Water District	2,770						
3	13	O'Neill Forebay	70.85	Department of Parks and Recreation	16	699	699	9	7		
				Cattle Program	0						
				Department of Fish & Game	64						
			70.91 Thru	San Luis Water District	699	699	699	0	0		
				(Floodwater Inflow)	0						
				Reach 3 Subtotal:	779	699	0	44	36		
			86.73								
					303,186						
4	14		89.03			2,477	189	39	153		
			Thru 94.06	San Luis Water District	2,477						
			89.66								
			Thru 89.67	Pacheco Water District	189						
			89.68	Panoche Water District	39						
	15		89.70	City of Dos Palos	153	251	1,140	2	7,724		
			Check No. 14	95.06							
			98.15								
			Thru 104.20	San Luis Water District	251						
			96.15								
			Thru 102.64	Panoche Water District	1,140						
			(Floodwater Inflow)	0							
			102.64	Broadview Water District	2						
			105.22								
			Thru 108.64	Westlands Water District	7,724						
			Check No.15	108.50							
				San Felipe Division Total:	3,699	3,699	0	0	0		
				Pacheco Water District Total:	189	189	0	0	0		
				Broadview Water District Total:	2	2	0	0	0		
				City of Dos Palos Total:	153	153	0	0	0		
				SLWD Reach 4 Subtotal:	3,427	3,427	0	0	0		
				Panoche Water District Total:	1,179	1,179	0	0	0		
				SLWD Total:	3,427	3,427	0	0	0		
				Westlands WD Reach 4 Subtotal:	7,724	7,724	0	0	0		

**Table 19b. Governor Edmund G. Brown California Aqueduct**

San Luis Field Division, Monthly Deliveries (Continued)

(In acre-feet)

**September 2003**

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries					
	Beginning and Ending					USBR	Transfer	DWR Recreation	USBR Recreation		
	No.	Structure	Mile								
5	16		110.52	(Reverse flow, Kings River)	0	8,711		2	1		
			Thru	Westlands Water District	8,711						
			122.05	Department of Fish and Game	3						
		Check No. 16	122.07								
	17		124.18	Westlands Water District	4,551	4,551					
			Thru								
		Check No. 17	132.95								
	18		133.81	Westlands Water District	8,244	8,244					
			Thru								
			142.61								
		Pleasant Valley Pumping Plant	143.16	Westlands Water District	6,572						
			143.16	City of Coalinga	929						
6	19		Check No. 18	143.23		929					
				Westlands WD Reach 5 Subtotal:	28,078						
					28,078		0	2	1		
			145.26	Westlands Water District	7,972		7,972				
			Thru								
			151.19	City of Huron Parks & Recreation	2						
7	20		Check No. 19	155.64		7,972					
				Westlands WD Reach 6 Subtotal:	7,972						
					7,972		0	0	0		
			156.34	City of Huron	156		156				
	21		156.40	Westlands Water District	3,444						
			Thru								
		Check No. 20	163.69								
			164.79	City of Avenal	270	3,444	270				
			167.04	Westlands Water District	2,691						
			Thru								
		Check No. 21	171.67								
			172.40		254,698						
			Reach 7 Total:	6,561	6,561	0	0	0			
			Westlands WD Total:	49,909	49,909	0	0	0			
			City of Coalinga Total:	929	929	0	0	0			
			City of Huron Total:	156	156	0	0	0			
			City of Avenal Total:	270	270	0	0	0			
Total San Luis Field Division Deliveries:					59,997	59,913	0	47	37		

**Table 20. Consolidated State-Federal San Luis Canal 1/**

Daily Operations  
September 2003

United States  
Department of the Interior  
Bureau of Reclamation  
Central Valley Project

State of California  
The Resources Agency  
Department of Water Resources  
State Water Project

Date	Storage In Canal (ac-ft)	Storage Change (ac-ft)	Inflow (cfs)		Outflow (cfs)				Computed Losses (-) Gains (+) (cfs)
			Non- Project	Dos Amigos Pumping Plant	Pools 14 & 15 2/	Pool 15	Pools 15 thru 21 3/	Flow Past Check 21	
Aug 31	29,634								
1	29,631	-3	0	6,323	89	31	1,660	4,940	396
2	29,761	130	0	6,224	89	31	1,660	4,902	524
3	29,019	-742	0	5,748	89	31	1,660	4,996	654
4	27,907	-1,112	0	5,294	62	13	959	4,537	-284
5	28,785	878	0	6,895	62	13	959	4,971	-448
6	29,451	666	0	7,574	62	13	959	5,944	-261
7	28,776	-675	0	5,382	62	13	959	4,548	-141
8	29,111	335	0	5,332	62	13	959	4,151	22
9	28,879	-232	0	5,105	62	13	962	4,375	190
10	28,421	-458	0	5,118	63	13	731	4,564	22
11	28,987	566	0	5,166	45	21	731	4,119	35
12	29,211	224	0	4,867	45	21	731	4,062	105
13	28,553	-658	0	4,974	45	21	731	4,720	212
14	29,589	1,036	0	5,100	45	21	734	4,045	267
15	29,739	150	0	4,396	45	21	669	3,789	204
16	29,397	-342	0	4,394	56	21	669	3,965	145
17	28,765	-632	0	4,366	56	21	702	3,967	62
18	29,096	331	0	5,045	36	23	702	4,140	23
19	29,125	29	0	4,772	36	23	702	4,058	62
20	29,249	124	0	4,692	36	23	702	4,104	235
21	29,402	153	0	5,222	36	23	702	4,581	197
22	29,409	7	0	3,772	36	23	702	3,193	185
23	28,408	-1,001	0	4,170	36	23	702	4,013	99
24	28,709	301	0	4,390	41	23	743	3,498	67
25	28,434	-275	0	4,910	42	17	743	4,035	-212
26	28,812	378	0	4,932	42	17	743	3,810	-129
27	29,095	283	0	5,073	42	17	743	4,288	160
28	29,250	155	0	4,518	42	17	743	3,835	197
29	29,275	25	0	4,811	42	17	743	4,210	214
30	28,584	-691	0	4,288	42	17	743	4,048	214
Total		-1,050	0	152,853	1,548	594	25,848	128,408	3,016
Mean cfs		---	0	5,095	52	20	862	4,280	101
Acre-feet		-1,050	0	303,186	3,070	1,179	51,269	254,698	5,980

1/ San Luis Canal includes Pools 14 through 21 of the California Aqueduct.

2/ Includes 188 AF AG & 1 AF M&I to Pacheco W.D., 153 AF to the City of Dos Palos, and 2,728 AF to SLWD.

3/ Includes 156 AF to the City of Huron, 270 AF to the City of Avenal, 929 AF to the City of Coalinga,  
3 AF to F&G @ WWD Lateral 4L, 2 AF to Broadview W.D., and 49,909 AF to Westlands WD.

**Table 21. San Joaquin Field Division Plant Data**

(in acre-feet)

**September 2003**

Date	Coastal Aqueduct					California Aqueduct			
	Las Perillas Pumping Plant	Badger Hill Pumping Plant	Devil's Den Pumping Plant	Bluestone Pumping Plant	Polonio Pass Pumping Plant	Buena Vista Pumping Plant	Teerink Pumping Plant	Chrisman Pumping Plant	Edmonston Pumping Plant
1	419	419	91	83	92	6,932	6,864	6,549	6,477
2	384	384	108	105	109	6,040	6,177	5,831	5,673
3	445	445	126	117	124	6,222	6,111	5,712	5,811
4	404	404	109	103	108	6,147	6,078	5,712	5,441
5	394	394	114	106	110	6,959	6,685	6,304	6,304
6	524	524	134	126	134	7,381	7,398	7,066	7,066
7	421	421	102	93	104	6,327	6,397	6,081	6,010
8	331	331	93	85	93	6,005	6,172	5,944	6,029
9	383	383	117	110	116	6,027	5,980	5,569	5,426
10	411	411	115	106	112	6,539	6,318	5,950	5,791
11	365	365	107	101	106	6,024	5,937	5,561	5,476
12	361	361	103	97	103	6,193	6,245	5,865	5,804
13	471	471	137	125	137	6,537	6,491	6,227	6,180
14	362	362	109	99	110	6,250	6,310	6,095	5,992
15	214	214	81	75	81	5,580	5,803	5,594	5,560
16	213	213	114	106	112	5,978	5,959	5,636	5,533
17	221	221	118	112	117	6,407	6,234	5,959	5,981
18	267	267	104	98	103	5,860	5,930	5,656	5,441
19	251	251	96	91	97	6,296	6,018	5,775	5,730
20	263	263	109	100	106	6,349	6,388	6,126	6,019
21	236	236	125	116	127	6,576	6,589	6,431	6,336
22	148	148	67	63	70	5,288	5,342	5,012	4,955
23	208	208	108	101	105	5,462	5,304	5,025	4,885
24	210	210	114	108	113	5,171	4,950	4,684	4,595
25	187	187	108	100	105	5,668	5,607	5,378	5,229
26	177	177	88	81	88	5,829	5,739	5,412	5,335
27	352	352	99	92	99	5,728	5,556	5,347	5,300
28	242	242	105	96	107	5,628	5,603	5,334	5,166
29	138	138	72	68	74	5,748	5,820	5,589	5,557
30	143	143	85	79	85	6,431	6,412	6,140	6,148
Total	9,145	9,145	3,158	2,942	3,147	183,582	182,417	173,564	171,250

**Table 22a. Governor Edmund G. Brown California Aqueduct**

San Joaquin Field Division, Monthly Deliveries

(In acre-feet)

**September 2003**

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries						
	Beginning and Ending					Table A Amount	USBR	Transfer 1/	Purchase Pool A	Other 2/		
	No.	Structure	Mile									
7	21	Check No. 21	172.40		254,698							
8C	22		172.66	Empire West Side Irrig. Dist. TL - A	0	500	720	306	186			
				County of Kings TL - A	500							
				TLBWSD TL-A	720							
8D			175.18	DRWD - 1	367	708	61	445	2,982			
			177.54	DRWD - 1B	186							
			180.64	TLBWSD - C	0							
			180.65	DRWD - 1A	445							
			182.99	DRWD - 2	2,982							
			183.00	Tulare Lake Basin WSD TL - B	708							
31A			184.00	DRWD - Paramount	3	1,378	3	5,300	0	0		
			184.63	Coastal Branch	9,145							
8D			184.78	Dudley Ridge Water Dist. DRWD - 3	1,378	1,378	61	0	0	0		
				Dudley Ridge Reach 8D Total:	5,361							
				Tulare Lake Basin WSD Total:	1,428							
			Check No. 22	184.82								
9	23		189.69	Kern County Water Agency Lost Hills Water Dist. - 1	3,532	3,532	817	179	0	0		
			191.18	Kern County Water Agency Lost Hills Water Dist. - 2	817							
			194.22	Kern County Water Agency Lost Hills Water Dist. - 3	179							
			196.40	Kern County Water Agency Berrenda Mesa - 2	0							
			196.75	Kern County Water Agency Lost Hills Water Dist. - 4	0							
				K.C.W.A. Reach 9 Subtotal:	4,528							
			Check No. 23	197.05								
10A	24		201.24	Kern County Water Agency Lost Hills Water Dist. - 7	213	213	398	9	0	0		
			202.05	Kern County Water Agency Lost Hills Water Dist. - 5	398							
			204.69	Kern County Water Agency Lost Hills Water Dist. - 6	0							
			205.26	Kern County Water Agency Lost Hills Water Dist. - 8	9							
			Check No. 24	207.94								
			209.71	Kern County Water Agency Belridge Water Storage Dist. - 1A	1,778	1,778	3,497	6,515	5,501	9,500		
10A	25		209.78	Kern National Wildlife Refuge USBR BV-1B	3,497							
				Kern County Water Agency Buena Vista WSD 1B	0							
			209.80	KCWA Semitropic WSD	6,515							
				KCWA Semitropic WSD Penstocks	15,001							
				USBR Total:	3,497							
				K.C.W.A. Reach 10A Subtotal:	23,914							

1/ KCWA's Table A transferred to DRWD due to common landowner.

2/ Santa Clara Valley WD 2003 Allocation stored in Semi Tropic.

**Table 22b. Governor Edmund G. Brown California Aqueduct**

San Joaquin Field Division, Monthly Deliveries (Continued)

(In acre-feet)

**September 2003**

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries						
	Beginning and Ending					Table A Amount	Recovery of Pump In	Purchase Pool A	Purchase Pool B	Other		
	No.	Structure	Mile									
11B	25		210.75	Kern County Water Agency Belridge - 2	0	233	233	0	0	0		
			214.11	Kern County Water Agency Belridge - 3	233							
			216.62	Kern County Water Agency Belridge - 4	0							
			217.13	Kern County Water Agency Belridge - 5	6,851		6,851	0	0	0		
				Kern County Water Agency Belridge - 5D	135							
		Check No. 25	217.79									
				K.C.W.A. Reach 11B Subtotal:	7,219		7,219	0	0	0		
12D	26		219.58	Kern County Water Agency Belridge - 6	0	402	402	0	0	0		
				Kern County Water Agency West Kern - 3	402							
		Check No. 26	224.92									
12E	27		230.37	Kern County Water Agency Buena Vista - 6	0	9,251	9,251	0	0	0		
		Check No. 27	231.73									
	28		235.75	Kern County Water Agency Buena Vista - 2	0							
				Kern County WA CVC	9,251							
				DRWD CVC	0							
				Tulare Co.	0							
			238.04	Lower Tule River	0							
				Fresno Co.	0							
				Pixley ID	0							
				Hacienda								
		Check No. 28	238.11	DWR Wells	0							
				1/ Arvin Edison Total:	0		0	0	0	0		
				Reach 12E Subtotal:	9,251		9,251	0	0	0		
13B	29		238.19	Kern Water Bank Inflow	0	122	122	0	0	0		
				Kern Water Bank Outflow	0							
			241.02	Kern River Intertie (inflow)	0							
			242.85	KCWA Buena Vista WSD - 7	0							
				KCWA Buena Vista WSD - 5	0							
			243.09	Kern County Water Agency Buena Vista - 3	122							
		Check No. 29	244.54	Buena Vista WSD	0							
	30		249.85	Kern County Water Agency Buena Vista - 4	630		630	0	0	0		
			250.99	Buena Vista Pumping Plant	183,582							
				K.C.W.A. Reach 13B Subtotal:	752		752	0	0	0		
14A	31		254.47	Kern County Water Agency West Kern - 2	0							
			256.11	Kern County Water Agency Wheeler Ridge-Maricopa - 2	0							

1/ Arvin Edison Contractors include Rag Gulch WD, Kern-Tulare WD, Fresno County, Hills Valley ID, Tri Valley WD, Tulare County, Lower Tule River ID, and Pixley ID.

**Table 22c. Governor Edmund G. Brown California Aqueduct**

San Joaquin Field Division, Monthly Deliveries (Continued)

(In acre-feet)

**September 2003**

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries						
	Beginning and Ending					Table A Amount	Recovery of Pump In	MWD Ent.	Ex-change	Other		
	No.	Structure	Mile									
14A	31	Check No. 31	256.14			168	682	0	0	0		
	32		258.61	Kern County Water Agency Wheeler Ridge-Maricopa - 3	168							
			260.44	Kern County Water Agency Wheeler Ridge-Maricopa - 4	682							
		Check No. 32	261.72			850	0	0	0	0		
				KCWA Reach 14A Subtotal:	850							
14B	33		264.42	Kern County Water Agency Wheeler Ridge-Maricopa - 5	1,775	680	1,268	0	0	0		
			266.91	Kern County Water Agency Wheeler Ridge-Maricopa - 6	680							
	Check No. 33		267.36									
	34		270.24	Kern County Water Agency Wheeler Ridge-Maricopa - 7	1,268	3,723	0	0	0	0		
		Check No. 34	271.27									
				Reach 14B Total:	3,723							
14C	35		272.39	Kern County Water Agency Wheeler Ridge-Maricopa - 8	1,035	437	853	0	0	1/ 1,400		
			276.09	Kern County Water Agency Wheeler Ridge-Maricopa - 9	437							
				Kern County Water Agency Arvin Edison WSD	2,253							
				Reach 14C Total:	3,725							
	Teerink Pumping Plant		278.13		182,417	3,490	4,025	0	0	0		
15A	36		279.02	Kern County Water Agency Wheeler Ridge-Maricopa - 9A	535							
			280.06	Kern County Water Agency Wheeler Ridge-Maricopa - 10	3,490							
				Reach 15-A Total:	4,025							
	Chrisman Pumping Plant		280.36		173,564							
16A	37		282.06	Kern County Water Agency Wheeler Ridge-Maricopa - 11	0	131	131	0	0	0		
		Check No. 37	283.95									
	38		285.01	Kern County Water Agency Wheeler Ridge-Maricopa - 12	17							
			286.39	Kern County Water Agency Wheeler Ridge-Maricopa - 13A	39							
			287.06	Kern County Water Agency Wheeler Ridge-Maricopa - 13	0							
	Check No. 38		287.09			556	556	0	0	0		
	39		287.62	Kern County Water Agency Wheeler Ridge-Maricopa - 13B	131							
		Check No. 39	290.21									
	40		291.26	Kern County Water Agency Wheeler Ridge-Maricopa - 14	556							
			293.07	Kern County Water Agency Wheeler Ridge-Maricopa - 15	250							
				Kern County Water Agency Tehachapi Cummings CWD	591							
				K.C.W.A. Reach 16A Subtotal:	1,584							
17E	Edmonston Pumping Plant		293.45		171,250							

1/ MWD's Table A to Arvin Edison WSD.

**Table 23. Governor Edmund G. Brown California Aqueduct**

San Joaquin Field Division, Monthly Deliveries (Coastal Branch)

(In acre-feet)

**September 2003**

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries						
	Beginning and Ending					Table A Amount	Recovery of Pump In	MWD Ent.	Exchange	Other		
	No.	Structure	Mile									
31A	C-1	Coastal Branch Control	0.02		9,145	279	5,885					
		Las Perillas Pumping Plant	1.16		9,145							
	C-2		3.79	Green Valley Water District	0							
		Badger Hill Pumping Plant	4.27		9,145							
	C-3	Coastal Check No. 3	7.21									
	C-4		9.34	Castaic Lake WA (Devil's Den WD #1)	0							
		Coastal Check No. 4	9.34									
	C-5	Coastal Check No. 5	12.20									
	C-6		13.30	Kern County Water Agency Berrenda Mesa - 3	279							
			14.83	Kern County Water Agency Berrenda Mesa - 1	5,885							
				Kern County Water Agency Berrenda Mesa - PO	0							
		Devil's Den Pumping Plant	14.86		3,158							
				K.C.W.A. Reach 31A Subtotal:	6,164	6,164	0	0	0	0		
				K.C.W.A. Total:	66,137	55,237	0	0	0	10,900		
33A	C-7	Bluestone Pumping Plant	19.05		2,942	2,686	441					
	C-8	Polonio Pass Pumping Plant	26.54		3,147							
	C-9	Tank Site 1	27.81	(CCWA) Polonio Pass Treatment Plant								
	C-10	Shandon T.O.	38.23	Santa Barbara County (CCWA)	2,686							
		Tank Site 2	58.63	Central Coast:	0							
34	C-11	Chorro Valley T.O.	69.31	San Luis Obispo County (CCWA)	441	3,127	0	0	0	0		
		Energy Dissipater	78.12									
35	C-12	Lopez T.O.	85.86	SLOCFC & WCD	0							
				CCWA Total:	3,127							
		Guadalupe T.O.	102.70	SBCFC & WCD	0							
		Santa Maria T.O.	107.43	SBCFC & WCD	0							
38		So. Cal. Water T.O.	109.20	SBCFC & WCD	0	0	0	0	0	0		
				SBCFC & WCD Total:	0							
		Tank Site 5	115.42									

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

September 2003

Date	West Branch					East Branch											
	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant		Alamo Powerplant			Pearblossom Pumping Plant	Mojave Siphon Powerplant			Devil Canyon Powerplant Generation	Cherry Valley	Green Spot	Crafton Hills	
		Generation	Leakage	Generation 1/	Pumpback 1/	Generation	Bypass Through Plant	Cottonwood Chute		Generation	Leakage	Bypass Flume					
28	1	3,038	3,282	0	4,742	2,665	3,178	0	236	3,014	2,900	0	0	3,061	15	20	0
	2	3,020	2,401	0	3,363	0	2,446	0	193	2,866	3,125	0	0	3,256	15	20	1
	3	2,707	2,355	0	2,628	0	2,991	0	58	2,414	1,960	0	0	3,114	15	20	1
	4	1,730	1,415	0	3,492	521	3,338	0	381	3,359	3,305	0	0	3,061	15	20	1
	5	2,203	1,407	0	4,229	1,142	3,546	0	470	3,531	3,375	0	0	3,126	15	20	1
	6	2,631	1,394	0	684	1,169	3,535	0	829	4,264	3,603	0	0	3,037	15	20	1
	7	1,555	1,523	0	18	4,982	3,520	0	875	4,091	3,818	0	0	3,286	15	20	1
	8	2,140	1,919	0	5,240	748	3,236	0	543	3,619	3,626	0	0	3,170	15	20	1
	9	1,737	2,154	0	5,980	2,847	3,403	0	262	3,413	3,474	0	0	3,207	15	20	0
	10	2,208	2,039	0	6,326	2,642	2,872	0	725	3,091	2,951	0	0	3,152	15	20	0
	11	1,982	2,039	0	6,228	2,757	2,918	0	553	2,987	2,934	0	0	3,057	16	20	0
	12	1,993	1,396	0	6,364	2,562	3,351	0	471	3,753	3,296	0	0	3,085	16	20	0
	13	1,560	2,065	0	720	3,090	3,599	0	913	4,045	3,987	0	0	3,156	16	20	1
	14	2,296	1,986	0	2,231	4,587	3,169	0	454	3,431	3,351	0	0	3,030	16	20	1
	15	2,551	2,605	0	6,331	1,629	1,999	0	928	2,967	3,208	0	0	3,194	16	20	1
	16	2,138	2,594	0	6,833	3,174	3,184	0	184	3,005	3,012	0	0	2,950	16	20	1
	17	2,686	2,550	0	6,615	2,015	3,142	0	194	2,948	2,639	0	0	3,196	16	20	1
	18	2,043	2,035	0	6,761	3,770	3,235	0	200	2,919	2,826	0	0	3,031	16	20	0
	19	2,258	2,464	0	7,797	2,507	3,238	0	261	3,015	3,097	0	0	3,178	16	20	0
	20	3,339	2,399	0	1,397	3,283	2,700	0	1	2,609	2,568	0	0	3,035	16	20	0
	21	2,243	2,069	0	4,177	5,291	3,530	0	544	3,706	3,106	0	0	3,077	16	20	0
	22	1,595	2,094	0	4,621	2,321	2,913	0	458	3,330	3,217	0	0	3,107	16	21	0
	23	1,725	1,836	0	3,574	1,568	2,974	0	225	2,890	3,021	0	0	3,098	16	21	0
	24	1,595	1,641	0	3,326	714	2,765	0	257	2,684	2,591	0	0	3,033	16	21	0
	25	1,870	1,726	0	4,657	2,485	3,043	0	274	3,097	3,042	0	0	3,103	16	21	0
	26	1,827	1,977	0	4,816	1,743	3,016	0	457	2,988	3,145	0	0	3,125	16	21	0
	27	1,953	1,907	0	274	0	3,139	0	210	3,110	3,137	0	0	2,978	16	21	0
	28	1,975	785	0	423	2,489	2,813	0	782	2,895	2,991	0	0	3,111	16	21	0
	29	2,737	3,136	0	5,456	1,630	2,516	0	312	2,648	2,279	0	0	3,128	16	21	0
	30	3,091	3,306	0	4,231	316	2,751	0	281	2,578	2,515	0	0	3,109	16	21	1
	Total	66,426	62,499	0	123,534	64,647	92,060	0	12,531	95,267	92,099	0	0	93,251	470	609	13

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**

Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**September 2003**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow			Computed Losses (-) And Gains (+)	
				Project		Natural	Project		United Water Agency	Natural To Piru Creek	
				Castaic Powerplant Pumpback 1/	Warne Powerplant	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries			
Aug 31	2573.46	164,106									
1	2574.32	165,194	1,088	2,665	3,282	8	4,742	0	0	52	-73
2	2573.44	164,081	-1,113	0	2,401	8	3,363	0	0	50	-109
3	2573.58	164,258	177	0	2,355	8	2,628	0	0	48	490
4	2572.24	162,571	-1,687	521	1,415	8	3,492	0	0	46	-93
5	2570.68	160,623	-1,948	1,142	1,407	8	4,229	0	0	44	-232
6	2572.15	162,459	1,836	1,169	1,394	8	684	0	0	42	-9
7	2577.09	168,729	6,270	4,982	1,523	8	18	0	0	40	-185
8	2575.04	166,108	-2,621	748	1,919	8	5,240	1	0	39	-16
9	2574.02	164,814	-1,294	2,847	2,154	8	5,980	0	0	37	-286
10	2572.59	163,011	-1,803	2,642	2,039	8	6,326	0	0	35	-131
11	2571.35	161,458	-1,553	2,757	2,039	8	6,228	0	0	33	-96
12	2569.33	158,949	-2,509	2,562	1,396	8	6,364	0	0	31	-80
13	2572.87	163,363	4,414	3,090	2,065	7	720	0	0	29	1
14	2576.23	167,626	4,263	4,587	1,986	7	2,231	0	0	27	-59
15	2574.50	165,422	-2,204	1,629	2,605	7	6,331	0	0	25	-89
16	2573.59	164,270	-1,152	3,174	2,594	6	6,833	0	0	23	-70
17	2571.90	162,145	-2,125	2,015	2,550	6	6,615	0	0	21	-60
18	2571.06	161,096	-1,049	3,770	2,035	6	6,761	0	0	20	-79
19	2568.72	158,196	-2,900	2,507	2,464	6	7,797	0	0	18	-62
20	2572.10	162,396	4,200	3,283	2,399	6	1,397	0	0	16	-75
21	2574.62	165,574	3,178	5,291	2,069	6	4,177	1	0	13	3
22	2574.34	165,219	-355	2,321	2,094	6	4,621	0	0	13	-142
23	2574.16	164,991	-228	1,568	1,836	6	3,574	0	0	13	-51
24	2573.30	163,904	-1,087	714	1,641	6	3,326	0	0	13	-109
25	2572.94	163,451	-453	2,485	1,726	7	4,657	0	0	13	-1
26	2572.00	162,271	-1,180	1,743	1,977	7	4,816	0	0	13	-78
27	2573.22	163,803	1,532	0	1,907	7	274	0	0	13	-95
28	2575.44	166,617	2,814	2,489	785	7	423	0	0	13	-31
29	2574.79	165,790	-827	1,630	3,136	8	5,456	0	11	6	-128
30	2574.24	165,092	-698	316	3,306	8	4,231	0	12	0	-85
Total				986	64,647	62,499	215	123,534	2	23	786
1/ Values supplied by LADWP, not verified by DWR.											-2,030

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**September 2003**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)	
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake			
							Natural	Project		
Aug 31	1522.82	24,457								
1	1527.20	26,400	1,943	4,742	0	2,665	0	0	-134	
2	1526.01	25,865	-535	3,363	0	0	0	3,900	2	
3	1526.57	26,116	251	2,628	0	0	0	2,375	-2	
4	1527.79	26,668	552	3,492	0	521	0	2,420	1	
5	1528.85	27,151	483	4,229	0	1,142	0	2,602	-2	
6	1523.30	24,666	-2,485	684	0	1,169	0	2,001	1	
7	1511.68	19,836	-4,830	18	0	4,982	0	0	134	
8	1517.08	22,013	2,177	5,240	0	748	0	2,310	-5	
9	1519.24	22,918	905	5,980	0	2,847	0	2,221	-7	
10	1520.61	23,501	583	6,326	0	2,642	0	3,102	1	
11	1520.79	23,578	77	6,228	0	2,757	0	3,484	90	
12	1525.10	25,460	1,882	6,364	0	2,562	0	1,922	2	
13	1515.28	21,274	-4,186	720	0	3,090	0	1,816	0	
14	1509.57	19,019	-2,255	2,231	0	4,587	0	0	101	
15	1516.44	21,749	2,730	6,331	0	1,629	0	1,973	1	
16	1518.00	22,396	647	6,833	0	3,174	0	3,013	1	
17	1521.75	23,992	1,596	6,615	0	2,015	0	3,003	-1	
18	1521.40	23,841	-151	6,761	0	3,770	0	3,141	-1	
19	1525.00	25,416	1,575	7,797	0	2,507	0	3,716	1	
20	1516.49	21,769	-3,647	1,397	0	3,283	0	1,760	-1	
21	1513.83	20,688	-1,081	4,177	0	5,291	0	0	33	
22	1515.58	21,396	708	4,621	0	2,321	0	1,592	0	
23	1515.51	21,368	-28	3,574	0	1,568	0	2,034	0	
24	1516.05	21,589	221	3,326	0	714	0	2,392	1	
25	1515.91	21,531	-58	4,657	0	2,485	0	2,230	0	
26	1515.92	21,535	4	4,816	0	1,743	0	3,068	-1	
27	1514.92	21,128	-407	274	0	0	0	680	-1	
28	1509.82	19,115	-2,013	423	0	2,489	0	0	53	
29	1514.08	20,789	1,674	5,456	0	1,630	0	2,154	2	
30	1513.96	20,740	-49	4,231	0	316	0	3,963	-1	
Total				-3,717	123,534	0	64,647	0	62,872	268

1/ Values supplied by LADWP, not verified by DWR.

**Table 27. Castaic Lake**

Daily Operation

(in acre-feet except as noted)

Capacity: 323,699 ac-ft

**September 2003**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow		Computed Losses (-) And Gains (+)	
				From Elderberry Forebay		Natural	Deliveries		
				Natural	Project				
Aug 31	1512.94	319,114							
1	1511.92	316,858	-2,256	0	0	0	2,201	0	
2	1512.68	318,538	1,680	0	3,900	0	2,316	0	
3	1512.75	318,693	155	0	2,375	0	2,229	0	
4	1512.80	318,804	111	0	2,420	0	2,197	0	
5	1512.93	319,092	288	0	2,602	0	2,207	0	
6	1512.81	318,826	-266	0	2,001	0	2,174	0	
7	1511.81	316,615	-2,211	0	0	0	2,187	0	
8	1511.81	316,615	0	0	2,310	0	2,191	0	
9	1511.86	316,725	110	0	2,221	0	2,194	0	
10	1512.28	317,653	928	0	3,102	0	2,149	0	
11	1512.85	318,914	1,261	0	3,484	0	2,047	0	
12	1512.71	318,604	-310	0	1,922	0	2,092	100	
13	1512.47	318,073	-531	0	1,816	0	2,192	100	
14	1511.48	315,887	-2,186	0	0	0	2,136	92	
15	1511.37	315,645	-242	0	1,973	0	2,100	0	
16	1511.70	316,372	727	0	3,013	0	2,179	0	
17	1511.97	316,968	596	0	3,003	0	2,280	0	
18	1512.36	317,830	862	0	3,141	0	2,276	0	
19	1512.99	319,225	1,395	0	3,716	0	2,259	0	
20	1512.81	318,826	-399	0	1,760	0	2,160	0	
21	1511.82	316,637	-2,189	0	0	0	2,182	0	
22	1511.49	315,909	-728	0	1,592	0	2,331	0	
23	1511.37	315,645	-264	0	2,034	0	2,352	0	
24	1511.39	315,689	44	0	2,392	0	2,231	0	
25	1511.42	315,755	66	0	2,230	0	2,180	0	
26	1511.74	316,460	705	0	3,068	0	2,229	0	
27	1511.05	314,941	-1,519	0	680	0	2,280	0	
28	1510.00	312,636	-2,305	0	0	0	2,280	0	
29	1509.97	312,571	-65	0	2,154	0	2,193	0	
30	1510.77	314,325	1,754	0	3,963	0	2,130	0	
Total			-4,789	0	62,872	0	66,154	292	
								-1,215	

**Table 28. Governor Edmund G. Brown California Aqueduct**

Southern Field Division, Monthly Deliveries (West Branch)

(In acre-feet)

**September 2003**

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries						
	Beginning and Ending					Table A Amount	Rec.	Local	Transfer	Flexible Payback		
	No.	Structure	Mile									
29A	42	Oso Pumping Plant	1.49		66,426							
29F	W2	Quail Lake	5.02	Antelope Valley-East Kern Water Agency	Re-moved	23	2					
		Quail Lake Embankment	7.82	Antelope Valley-East Kern Water Agency	Stub							
		Warne Power Plant	14.07		62,499							
29H	W3	Pyramid Lake		Calif. State Park Pyramid Recreation	2	50	50					
			14.10	United Water Conservation District	23							
		Pyramid Dam	17.10	Piru Creek Fish Enhancement	0							
		Castaic Power Plant	25.82	( 64,647 AF pumpback ) 2/	123,534							
29J	W4	Elderberry Forebay				13,971	2,478					
		Forebay Dam	28.12									
30 1/	W5	Castaic Lake		Calif. State Park Castaic Lake Recreation	50	13,971	46,763					
		Castaic Dam	31.47									
		Castaic Lake Outlet	31.55	MWD - 78"	13,971							
				MWD - 132"	46,763							
				Castaic Lake WA - T1	2,478							
				Castaic Lake WA	2,738							
				United Water Conservation Dist.	0							
				MWD - Ventura County FCD	154							
				LA Co. Parks & Recreation	0							
				Releases to Lagoon	292							
				Reach 30 Subtotal:	66,154	66,104	50	0	0	0		
	W6	Castaic Lagoon		Recreation to Lagoon	292		292					
		Castaic Lagoon Outlet	31.87									

1/ Reach 30 actually terminates at mile 31.50. It is shown here as including the outlet works at mile 31.55.

All deliveries from the outlet works and from the Lagoon are billed to Reach 30.

2/ Value supplied by LADWP, not verified by DWR.

**Table 29. Silverwood Lake**

## Daily Operation

(in acre-feet except as noted)

Capacity: 74,970 ac-ft

**September 2003**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow					Computed Losses (-) And Gains (+)	Las Flores Ranch Exchange 1/
							Project			Del. To Mojave W.A.	Natural To Mojave River		
				Mojave Siphon Power-plant	Mojave Bypass Flume	Natural Stream Flow	Delivered to CLAWA	Rec.	San Bernardino Tunnel				
Aug 31	3349.00	69,238											
1	3348.80	69,052	-186	2,900	0	0	12	0	3,061	0	0	-13	11
2	3348.60	68,865	-187	3,125	0	0	10	0	3,256	0	0	-46	11
3	3347.35	67,706	-1,159	1,960	0	0	9	0	3,114	0	1	5	11
4	3348.50	68,772	1,066	3,305	0	0	10	0	3,061	0	0	832	11
5	3348.65	68,912	140	3,375	0	0	9	0	3,126	0	1	-99	11
6	3349.15	69,379	467	3,603	0	0	10	0	3,037	0	0	-89	11
7	3350.11	70,280	901	3,818	0	0	9	0	3,286	0	1	379	11
8	3350.70	70,837	557	3,626	0	0	9	0	3,170	0	0	110	11
9	3350.40	70,554	-283	3,474	0	0	8	1	3,207	0	1	-540	11
10	3350.10	70,271	-283	2,951	0	0	7	0	3,152	0	0	-75	8
11	3350.60	70,742	471	2,934	0	0	8	0	3,057	0	0	602	9
12	3351.20	71,311	569	3,296	0	0	8	0	3,085	0	1	367	6
13	3352.00	72,073	762	3,987	0	0	8	0	3,156	0	0	-61	6
14	3352.40	72,456	383	3,351	0	0	9	0	3,030	0	0	71	6
15	3352.79	72,830	374	3,208	0	0	7	0	3,194	0	1	368	6
16	3352.80	72,839	9	3,012	0	0	8	0	2,950	0	0	-45	6
17	3352.30	72,360	-479	2,639	0	0	7	0	3,196	0	1	86	6
18	3352.05	72,121	-239	2,826	0	0	10	0	3,031	0	0	-24	6
19	3351.95	72,025	-96	3,097	0	0	9	0	3,178	0	1	-5	6
20	3351.55	71,644	-381	2,568	0	0	9	0	3,035	0	0	95	4
21	3352.40	72,456	812	3,106	0	0	10	0	3,077	0	0	793	6
22	3352.50	72,551	95	3,217	0	0	10	1	3,107	0	0	-4	6
23	3351.80	71,882	-669	3,021	0	0	9	0	3,098	0	0	-583	6
24	3351.50	71,596	-286	2,591	0	0	11	0	3,033	0	1	168	6
25	3351.40	71,501	-95	3,042	0	0	8	0	3,103	0	0	-26	6
26	3351.39	71,492	-9	3,145	0	0	9	0	3,125	0	0	-20	6
27	3351.50	71,596	104	3,137	0	0	8	0	2,978	0	0	-47	6
28	3351.40	71,501	-95	2,991	0	0	10	0	3,111	0	1	36	6
29	3350.50	70,648	-853	2,279	0	0	6	0	3,128	0	0	2	6
30	3349.80	69,988	-660	2,515	0	0	6	0	3,109	0	1	-59	6
Total				750	92,099	0	263	2	93,251	0	11	2,178	228

1/ Project water delivered from Mojave Siphon in exchange for like amount of Natural Streamflow.

**Table 30. Lake Perris**

Daily Operation

(in acre-feet except as noted)

Capacity: 131,452 ac-ft

**September 2003**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow 1/	Outflow 2/	Computed Losses (-) Gains (+) 1/
Aug 31	1583.17	115,955				
1	1583.13	115,866	-89		108	
2	1583.05	115,689	-177		109	
3	1582.99	115,557	-132		108	
4	1582.93	115,424	-133		108	
5	1582.82	115,181	-243		108	
6	1582.79	115,114	-67		108	
7	1582.69	114,893	-221		108	
8	1582.60	114,695	-198		107	
9	1582.48	114,430	-265		109	
10	1582.50	114,474	44		100	
11	1582.49	114,452	-22		87	
12	1582.47	114,408	-44		47	
13	1582.43	114,320	-88		10	
14	1582.42	114,298	-22		9	
15	1582.41	114,276	-22		10	
16	1582.40	114,254	-22		9	
17	1582.35	114,144	-110		9	
18	1582.30	114,034	-110		12	
19	1582.35	114,144	110		11	
20	1582.30	114,034	-110		18	
21	1582.35	114,144	110		10	
22	1582.26	113,946	-198		19	
23	1582.26	113,946	0		10	
24	1582.23	113,880	-66		19	
25	1582.20	113,814	-66		18	
26	1582.17	113,748	-66		19	
27	1582.15	113,704	-44		19	
28	1582.14	113,682	-22		18	
29	1582.08	113,550	-132		41	
30	1582.10	113,594	44		49	
<b>Total</b>			<b>-2,361</b>	<b>1,088</b>	<b>1,517</b>	<b>-1,932</b>

1/ Readings are not taken on a daily basis. End of month only.

2/ Includes deliveries of 1,473 AF to MWD from Reach 28J and 44 AF recreation water to California State Park.

**Table 31a. Governor Edmund G. Brown California Aqueduct**  
 Southern Field Division, Monthly Deliveries (East Branch)

(In acre-feet)

**September 2003**

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries					
	Beginning and Ending		No.			Table A Amount	Rec.	Transfer	Purchase Pool A	Transfer Local Out	
	No.	Structure	Mile								
17E	40	Edmonston Pumping Plant	293.45		171,250						
	41		298.65	Kern County Water Agency Tej.-Cas	Stub						
17F		Check No. 41	303.41								
18A	42	Check No. 42	304.99								
19	43	Alamo Powerplant	305.73	(Does not include 12,531 AF flow down Cottonwood Chute)	92,060						
			308.05	Antelope Valley-East Kern WA	0						
		Check No. 43	309.70								
	44		311.84	LADWP Connection	0						
			313.50	AVEK 245th Street West	0						
		Check No. 44	314.81								
	45		314.93	AVEK 235th Street West	0						
			315.57	AVEK 225th Street West	0						
		Check No. 45	319.74								
	46		323.19	Antelope Valley-East Kern WA Fairmont	1,134		1,134	155	0	0	
				Mojave Water Agency Fairmont	155						
		Check No. 46	323.84								
				Reach 19 Total:	1,289						
20A	47	Check No. 47	326.77				104				
	48		326.91	Antelope Valley-East Kern WA Willow Springs Siphon	104						
			329.65	Antelope Valley-East Kern WA 120th Street West	Re- moved						
		Check No. 48	330.82								
	49	Check No. 49	335.93								
	50		336.73	AVEK WA - Quartz Hill (Wheeled for Palmdale WD)	4,470		4,470	81	0	0	
				Antelope Valley-East Kern WA	0						
			339.68	Antelope Valley-East Kern WA	81						
20B	51	Check No. 50	341.51				165				
	52	Check No. 51	342.07								
			342.80	Antelope Valley-East Kern WA 30th Street West	Not in Use						
			343.50	Antelope Valley-East Kern WA Temporary 10 & 12	165						
	53	Check No. 52	343.74								
			346.98	PWD Palmdale	1,170		1,170	186	0	0	
			348.14	Antelope Valley-East Kern WA Acton Treatment Plant	186						
21	54	Check No. 53	348.17				55	602	0	0	
	55	Check No. 54	350.25								
	56	Check No. 55	352.70								
		Check No. 56	354.76								
22A			354.97	Littlerock Creek I.D.	0		55	602	0	0	
	57	Check No. 57	356.93								
	58		357.60	Antelope Valley-East Kern WA	55						
			357.72	Antelope Valley-East Kern WA 96th Street East	0						
			359.82	Antelope Valley-East Kern WA East Side Treatment Plant	602						

**Table 31b. Governor Edmund G. Brown California Aqueduct**

Southern Field Division, Monthly Deliveries (East Branch, Continued)

(In acre-feet)

**September 2003**

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries						
	Beginning and Ending					Table A Amount	Recreation	Ex-change	Transfer	Flexible Payback		
	No.	Structure	Mile									
22B	58	Pearblossom Pumping Plant	360.61		95,267	1,181	21	86	228			
	59	Check No. 59	366.09									
	60		366.50		Antelope Valley-East Kern WA							
		Check No. 60	373.94									
	61	Check No. 61	379.00									
	62	Check No. 62	384.26									
	63	Check No. 63	389.20		Mojave Water Agency	1,181	21	86	228			
			394.60		Mojave River							
	64	Check No. 64	395.10		Mojave Water Agency	86	2	2,555				
	65	Check No. 65	400.32		Temporary							
23	66	Check No. 66	403.41	401.10	Mojave Water Agency	86	2	2,555				
					Morongo 24" and 42"							
24	67	Silverwood Lake	407.65		Mojave Water Agency	0	2	2,555				
					Hesperia							
25	67	San Bernardino Tunnel	411.46		Las Flores Ranch	228	2	2,555				
					Calif. State Park							
26A	68	Devil Canyon Afterbay Control Structures	412.88		San Bernardino Silverwood Agency (Rec.)	92,099	2	2,555				
					93,251							
					San Gorgonio Pass Water Agency	0	2	2,555				
					93,251							
					MWD-SC Rialto	5,347	2	2,555				
					Desert Water Agency (MWD Wheeling Exchange)							
					San Gabriel Valley Water District	5,869	2	2,555				
					Coachella Valley WD (MWD Wheeling Exchange)							
					San Bernardino Valley MWD 24" and 72"	3,558	2	2,555				
					711							
28G	69	Santa Ana Valley Pipeline	425.46		San Gorgonio Pass WA (East Branch Extension)	13	2	2,555				
					MWD (SBVMWD Exchange)							
28H	69	Lake Perris	433.06		460	39,631	2	2,555				
					Box Springs							
28J	69	Lake Perris	440.05		MWD-SC	22,651	2	2,555				
					Perris Bypass Pipeline							
28J	69	Lake Perris	442.00		MWD-SC 18"	272	2	2,555				
					MWD-SC 54"							
					460	460	2	2,555				
					741							
			443.44		Calif. State Park	44	2	2,555				
					Lake Perris Recreation							
					MWD Total:	151,825	0	2,555				

**Table 32. Water Quality At Selected SWP Locations**

September 2003

Constituent	Units	Thermalito Afterbay At Outlet	North Bay Aqueduct Barker Slough Pumping Plant	Banks Pumping Plant	Delta Mendota Canal At McCabe Rd.	California Aqueduct				Devil Canyon Afterbay Near San Bernardino
						O'Neill Forebay Outlet (Check 13)	Kettleman City (Check 21)	Near Hwy 119 (Check 29)	Tehachapi Afterbay (Check 41)	
Alkalinity	mg/l as CaCO <sub>3</sub>	41	93	73	77	74	72	70	70	73
Antimony	mg/l	NR	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	NR	NR
Arsenic	mg/l	<0.001	0.002	0.002	0.002	0.002	0.002	<0.001	0.002	0.002
Beryllium	mg/l	NR	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron	mg/l	<0.1	0.1	<0.1	0.1	<0.1	0.1	<0.1	<0.1	0.1
Bromide	mg/l	NR	0.02	0.16	0.13	0.16	0.15	0.11	0.12	0.12
Calcium	mg/l	7	14	13	15	14	16	13	14	15
Carbon - Dissolved Organic	mg/l as C	NR	3	2	3	2	2	2	2	2
Carbon - Total Organic	mg/l as C	NR	5	2	3	2	2	2	2	2
Chloride	mg/l	<1	14	50	42	52	47	40	40	40
Chromium	mg/l	<0.001	0.001	0.001	0.001	0.001	0.001	<0.001	0.001	0.001
Copper	mg/l	<0.001	0.002	0.002	0.002	0.002	0.002	<0.001	0.002	0.002
Fluoride	mg/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hardness	mg/l as CaCO <sub>3</sub>	30	80	74	79	76	72	70	72	75
Iron	mg/l	0.005	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Lead	mg/l	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Magnesium	mg/l	3	11	10	10	10	10	9	9	9
Manganese	mg/l	<0.005	0.012	0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Nitrate + Nitrite	mg/l as N	<0.01	0.13	0.20	NR	NR	0.26	NR	0.17	0.26
Phosphorus-Ortho	mg/l as P	<0.01	0.10	0.06	NR	NR	0.07	NR	0.06	0.07
Phosphorus-Total	mg/l	<0.01	0.22	0.09	NR	NR	0.08	NR	0.08	0.09
Selenium	mg/l	NR	<0.001	<0.001	NR	NR	NR	<0.001	NR	NR
Sodium	mg/l	3	18	34	32	35	36	29	30	30
Specific Conductance	µS/cm	79	252	337	330	348	335	295	299	311
Sulfate	mg/l	2	16	16	20	18	20	16	16	21
Total Dissolved Solids	mg/l	49	150	200	195	206	199	175	176.5	185
Turbidity	NTU	2	67	7	7	3	5	3	5	2
Zinc	mg/l	<0.005	<0.005	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005

mg/l milligrams per liter

µg/l micrograms per liter

µS/cm microSiemens per centimeter

NR - Not Reported

NTU - nephelometric turbidity units

**Table 33. Water Quality At Selected Delta Stations**

**September 2003**

Date	Tides (feet above mean sea level)		Flow In CFS		Electrical Conductivity in milliSiemens/cm									Cl in mg/l	
	(Antioch) Daily Mean		Net Delta Outflow Index		Rio Vista	Antioch	Chippis Island	Emmaton		Jersey Point		Clifton Court	Cache Slough	Delta Mendota Canal	
	Mean Daily	Monthly Average	md	md				md	14dm	md	14dm				
	Hi	Half													md
1	3.33	1.39	3,773	3,773	8,855	1.36	5.76	0.37	0.30	0.53	0.43	0.30	0.50	0.31	50
2	3.43	1.42	3,489	3,631	8,775	1.57	6.05	0.41	0.31	0.54	0.44	0.30	0.51	0.29	51
3	3.59	1.58	3,329	3,530	8,682	1.83	0.00	0.48	0.33	0.61	0.46	0.30	0.43	0.29	51
4	3.61	1.63	3,415	3,501	8,747	1.87	0.00	0.54	0.35	0.64	0.48	0.30	0.39	0.30	51
5	3.52	1.57	3,964	3,594	9,083	1.96	0.00	0.52	0.37	0.65	0.50	0.30	0.35	0.32	55
6	3.52	1.46	4,325	3,716	9,309	2.00	0.00	0.52	0.39	0.65	0.52	0.30	0.38	0.33	53
7	3.48	1.39	4,137	3,776	9,121	2.03	0.00	0.52	0.41	0.65	0.53	0.30	0.37	0.33	54
8	3.37	1.26	4,850	3,910	9,003	2.04	0.00	0.51	0.42	0.64	0.55	0.30	0.44	0.34	57
9	3.21	1.25	4,334	3,957	8,942	2.03	0.00	0.49	0.43	0.64	0.56	0.30	0.51	0.33	60
10	3.06	1.10	3,973	3,959	8,860	1.92	6.09	0.46	0.44	0.64	0.58	0.30	0.55	0.34	65
11	2.78	0.94	4,325	3,992	9,170	1.81	5.88	0.39	0.44	0.63	0.59	0.30	0.57	0.35	69
12	2.47	0.95	4,576	4,041	9,391	1.88	5.98	0.38	0.45	0.64	0.60	0.30	0.55	0.34	71
13	2.61	1.03	4,388	4,068	9,288	2.01	6.42	0.36	0.45	0.68	0.62	0.30	0.54	0.34	75
14	2.87	1.19	3,989	4,062	8,913	2.11	7.21	0.47	0.46	0.73	0.63	0.30	0.51	0.33	78
15	3.09	1.47	4,447	4,088	8,525	2.49	8.35	0.59	0.47	0.79	0.65	0.30	0.48	0.33	79
16	3.01	1.44	4,774	4,131	8,230	2.49	8.03	0.47	0.48	0.79	0.67	0.30	0.52	0.33	80
17	2.87	1.25	4,408	4,147	8,524	2.28	6.47	0.39	0.47	0.75	0.68	0.30	0.57	0.35	78
18	2.77	1.21	3,882	4,132	8,880	2.31	6.56	0.43	0.46	0.75	0.69	0.30	0.59	0.35	79
19	2.89	1.32	4,013	4,126	8,958	2.39	7.45	0.40	0.46	0.75	0.70	0.30	0.61	0.36	80
20	2.97	1.33	3,266	4,083	8,392	2.77	8.09	0.54	0.46	0.84	0.71	0.30	0.60	0.36	81
21	3.05	1.31	2,742	4,019	7,987	3.14	8.67	0.73	0.47	0.97	0.73	0.30	0.57	0.36	81
22	3.05	1.27	2,564	3,953	7,701	3.55	9.43	0.93	0.50	1.05	0.76	0.30	0.60	0.36	81
23	3.26	1.46	1,980	3,867	7,475	4.20	11.52	1.28	0.56	1.20	0.80	0.30	0.56	0.33	79
24	3.28	1.40	2,128	3,795	7,053	4.44	12.02	1.61	0.64	1.32	0.85	0.30	0.51	0.35	85
25	3.08	1.22	2,552	3,745	7,024	4.08	11.20	1.43	0.72	1.25	0.89	0.30	0.52	0.37	84
26	2.79	1.11	2,570	3,700	7,111	3.94	10.75	1.25	0.78	1.24	0.94	0.30	0.54	0.37	83
27	2.86	1.13	2,154	3,643	6,839	4.03	10.80	1.55	0.86	1.33	0.98	0.30	0.52	0.37	85
28	3.02	1.15	2,143	3,589	6,684	4.08	11.14	1.90	0.96	1.36	1.03	0.30	0.51	0.40	85
29	3.16	1.17	2,239	3,542	6,486	4.26	10.93	2.33	0.99	1.42	1.07	0.30	0.52	0.41	86
30	3.24	1.13	2,662	3,513	6,587	4.36	11.11	1.54	1.08	1.46	1.12	0.30	0.53	0.42	90

Clifton Court Cl(mg/l)=200X EC - 25

e = Estimated

f = Excess Delta conditions with fish concerns.

N.R. = No Record.

r = Excess delta conditions with export/inflow ratio concerns.

N.C. = Not computed due to insufficient data.

dm = Daily Mean

s = Balanced water conditions with storage withdrawals.

md = Mean Daily

**Table 34. Pesticides, Herbicides, and Other Organic Substances Detected In the SWP**

**September 2003**

Sampling Location	Sample Date 1/	Chemical Detected	Concentration µg/l 2/
North Bay Aqueduct At Barker Slough Pumping Plant	September 16, 2003	None Detected	
California Aqueduct At Banks Pumping Plant	September 16, 2003	None Detected	
O'Neill Forebay Outlet Check 13	September 16, 2003	None Detected	
Delta Mendota Canal At McCabe Road	September 16, 2003	None Detected	
California Aqueduct Near Kettleman City (Check 21)	September 16, 2003	None Detected	
California Aqueduct At Near Highway 119 (Check 29)	September 16, 2003	None Detected	
California Aqueduct At Tehachapi Afterbay (Check 41)	September 16, 2003	None Detected	

1/ Locations are normally sampled during March, June, and September. Monthly reports will include data for the month in which samples were most recently taken.

2/ Micrograms per liter.

**Table 35. Oroville and Delta Field Divisions Energy Data**

(in kWh)

**September 2003**

Date	Oroville Thermalito Complex		Barker Slough Pumping Plant	Cordelia Pumping Plant Load	Banks Pumping Plant		South Bay Pumping Plant Load	Del Valle Pumping Plant Load
	Generation	Load			Total Load	SWP Load		
1	7,951,680	0	30,513	33,579	3,909,120	3,909,120	475,945	210
2	9,765,216	0	33,607	34,825	3,870,336	3,870,336	465,015	216
3	8,703,648	0	31,080	34,790	3,927,168	3,927,168	383,860	214
4	8,464,320	0	33,894	30,842	3,915,648	3,915,648	325,435	200
5	8,541,504	1,728	28,707	29,575	3,921,984	3,921,984	314,845	181
6	5,712,768	0	22,050	28,252	3,948,096	3,948,096	315,055	175
7	6,041,376	0	26,509	30,653	3,944,256	3,944,256	310,520	169
8	8,783,424	0	30,261	33,285	3,912,768	3,912,768	309,520	175
9	7,624,224	0	29,533	32,116	3,960,000	3,960,000	311,930	167
10	8,659,584	0	30,037	33,516	3,938,496	3,938,496	295,230	180
11	9,160,704	0	33,082	31,584	4,222,080	4,222,080	295,415	195
12	9,139,680	0	38,661	31,339	3,931,968	3,931,968	309,520	228
13	4,481,856	0	29,708	29,029	4,047,936	4,047,936	307,385	226
14	3,488,256	0	26,782	29,820	4,046,208	4,046,208	327,285	220
15	5,337,504	0	26,250	28,637	3,914,880	3,914,880	400,470	204
16	5,531,040	0	26,180	28,434	3,912,960	3,912,960	470,680	177
17	5,802,912	0	24,668	28,217	3,921,408	3,921,408	463,330	188
18	5,842,368	0	34,013	31,213	3,809,664	3,809,664	463,375	201
19	5,072,832	576	28,399	32,235	3,956,160	3,956,160	460,555	203
20	1,801,440	4,608	26,453	31,332	3,953,472	3,953,472	390,620	210
21	2,067,840	288	27,363	29,687	4,059,840	4,059,840	343,480	223
22	4,550,688	3,168	31,101	36,631	3,981,120	3,773,120	363,595	232
23	4,952,736	0	33,852	37,870	3,919,488	3,711,488	351,265	219
24	3,448,800	0	33,110	34,923	3,478,080	3,270,080	341,225	182
25	3,953,664	0	37,933	34,083	3,218,880	3,010,880	375,025	177
26	4,375,872	1,728	31,717	34,237	3,280,128	3,072,128	363,095	186
27	1,262,016	2,880	26,110	33,621	3,235,392	3,027,392	354,555	3,386
28	3,387,744	4,032	21,924	30,485	3,210,048	3,210,048	349,160	6,810
29	3,649,824	0	18,942	32,760	3,071,424	2,863,424	358,535	6,770
30	4,248,000	0	24,598	36,372	2,898,432	2,690,432	460,080	812
Total	171,803,520	19,008	877,037	963,942	113,317,440	111,653,440	11,056,005	22,936

**Table 36. San Luis Field Division Energy Data**

(in kWh)

September 2003

Date	Dos Amigos Pumping Plant		Gianelli Pumping-Generating Plant			
	Total Load	SWP Load 1/	Total Generation	SWP Generation 1/	Total Load	SWP Load 1/
1	1,684,944	802,944	366,336	21,336	1,312,992	1,312,992
2	1,679,616	797,616	367,488	22,488	1,455,264	1,455,264
3	1,535,472	653,472	0	0	1,862,784	1,862,784
4	1,340,064	458,064	667,296	69,296	2,159,424	2,159,424
5	1,847,520	1,436,520	0	0	1,910,304	1,910,304
6	1,982,016	1,571,016	0	0	888,480	888,480
7	1,386,144	978,144	0	0	1,700,064	867,064
8	1,396,080	985,080	0	0	1,021,248	580,248
9	1,340,352	1,130,352	0	0	1,412,352	1,216,352
10	1,365,120	1,155,120	0	0	2,525,472	1,643,472
11	1,400,832	1,190,832	0	0	2,184,480	1,400,480
12	1,303,056	1,093,056	0	0	2,433,600	1,992,600
13	1,385,712	1,175,712	0	0	1,824,480	1,383,480
14	1,381,392	1,165,392	0	0	1,364,256	1,021,256
15	1,200,816	990,816	0	0	1,321,920	1,321,920
16	1,179,792	969,792	36,000	36,000	1,463,616	1,463,616
17	1,186,272	1,051,272	63,648	63,648	2,042,208	2,042,208
18	1,359,072	1,224,072	49,536	49,536	2,336,832	1,013,832
19	1,295,424	1,160,424	47,232	47,232	1,512,864	1,512,864
20	1,302,192	1,167,192	0	0	301,536	301,536
21	1,391,472	1,319,472	0	0	3,677,760	1,913,760
22	1,031,184	959,184	0	0	834,048	491,048
23	1,133,712	1,061,712	0	0	2,229,696	1,543,696
24	1,186,848	1,114,848	0	0	1,844,352	1,060,352
25	1,335,312	1,263,312	0	0	1,319,904	878,904
26	1,329,552	1,257,552	0	0	1,321,920	439,920
27	1,408,464	1,336,464	0	0	791,712	7,712
28	1,247,472	1,175,472	0	0	1,175,616	-384
29	1,301,472	1,229,472	0	0	543,744	4,744
30	1,163,232	1,091,232	0	0	881,856	-144
Total	41,080,608	32,965,608	1,597,536	309,536	47,654,784	33,689,784

1/ Negative values may appear in SWP columns and indicate a mismatch of scheduled CVP energy and actual pumping; adjustments to SWP water shares are made to balance the mismatch.

**Table 37. San Joaquin Field Division Pumping Plant Energy Load Data**

(in kWh)

September 2003

Date	Coastal Branch					California Aqueduct			
	Las Perillas	Badger Hill	Devils Den	Bluestone	Polonio	Buena Vista	Teerink	Chrisman	Edmonston
1	31,970	83,648	65,358	61,164	65,142	1,664,784	1,791,144	3,950,496	14,555,520
2	29,850	77,400	76,986	75,492	77,418	1,454,184	1,611,216	3,534,048	12,754,800
3	34,320	89,328	88,686	83,718	87,444	1,494,504	1,593,000	3,470,976	13,067,280
4	31,110	81,336	76,878	73,764	76,302	1,476,864	1,585,728	3,444,192	12,244,320
5	30,354	79,176	80,262	75,888	77,436	1,673,352	1,739,880	3,820,896	14,168,160
6	40,182	104,848	95,778	90,792	95,292	1,778,832	1,928,664	4,248,288	15,888,960
7	31,702	82,960	73,368	69,048	74,088	1,521,720	1,675,152	3,670,848	13,516,560
8	24,948	63,896	66,204	62,388	65,934	1,444,032	1,608,552	3,586,464	13,440,240
9	29,586	77,968	82,098	78,588	81,342	1,446,768	1,554,912	3,376,800	12,234,240
10	31,332	79,440	80,604	76,194	78,444	1,567,872	1,641,168	3,610,944	13,032,000
11	28,180	73,608	75,726	72,288	74,862	1,430,496	1,538,208	3,377,376	12,334,320
12	28,032	74,184	73,386	70,128	72,720	1,489,824	1,616,184	3,531,168	13,063,680
13	36,722	95,400	96,696	91,080	96,606	1,604,952	1,682,136	3,736,800	13,888,800
14	28,490	76,616	77,616	72,594	77,958	1,499,616	1,649,592	3,667,104	13,487,760
15	17,158	45,512	57,870	55,008	57,870	1,360,800	1,518,264	3,386,304	12,494,160
16	17,224	46,016	79,920	76,194	78,552	1,464,624	1,554,408	3,406,464	12,460,320
17	17,666	47,600	82,800	79,830	82,260	1,534,392	1,626,264	3,585,888	13,476,240
18	20,514	55,312	73,710	70,668	72,828	1,405,800	1,549,944	3,404,448	12,265,200
19	19,090	48,888	68,490	66,168	69,282	1,527,048	1,566,720	3,473,856	12,912,480
20	20,710	56,104	76,806	71,982	74,952	1,535,688	1,670,040	3,686,976	13,559,760
21	18,342	51,288	89,262	84,078	89,838	1,596,888	1,716,336	3,868,416	14,268,960
22	11,422	32,256	49,374	46,800	50,310	1,278,792	1,391,400	3,045,024	11,165,040
23	15,766	37,816	76,230	72,288	74,160	1,292,472	1,389,384	3,035,232	11,088,720
24	16,128	41,712	80,154	77,094	79,398	1,250,856	1,296,144	2,841,696	10,364,400
25	14,590	37,784	75,690	72,288	74,646	1,368,936	1,461,528	3,191,328	11,714,400
26	13,964	38,600	62,784	59,310	62,478	1,417,536	1,499,472	3,282,624	12,013,920
27	27,268	71,552	70,470	66,924	70,128	1,389,816	1,446,192	3,238,848	11,955,600
28	19,386	53,032	75,114	69,894	75,762	1,366,056	1,450,152	3,225,024	11,655,360
29	11,366	30,264	52,254	50,238	53,208	1,394,280	1,518,192	3,390,336	12,522,960
30	11,206	28,392	61,452	58,194	60,786	1,561,752	1,672,992	3,732,480	13,840,560
Total	708,578	1,861,936	2,242,026	2,130,084	2,227,446	44,293,536	47,542,968	104,821,344	385,434,720

**Table 38. Southern Field Division Energy Data**

(in kWh)

**September 2003**

Date	West Branch			East Branch			
	Oso Pumping Plant Load	Warne Powerplant Generation	Castaic Powerplant SWP Generation	Alamo Powerplant Generation	Pearblossom Pumping Plant Load	Devil Canyon Powerplant Generation	Mojave Siphon Powerplant Generation
1	793,744	1,791,216	2,400,000	378,028	2,012,928	3,708,864	238,203
2	790,720	1,382,184	2,400,000	284,900	1,921,068	3,892,896	256,998
3	708,456	1,640,664	2,400,000	356,720	1,629,144	3,727,392	161,364
4	454,608	782,208	1,200,000	396,564	2,255,616	3,666,432	276,654
5	578,760	777,600	1,200,000	418,264	2,359,992	3,746,976	284,445
6	691,096	848,736	1,200,000	416,696	2,846,040	3,665,184	311,388
7	411,264	943,992	1,200,000	415,408	2,733,924	3,976,416	316,386
8	562,576	1,065,672	1,920,000	381,948	2,418,660	3,830,400	289,443
9	458,528	1,211,760	1,920,000	407,176	2,289,264	3,841,248	276,402
10	579,432	1,133,640	1,920,000	335,216	2,070,804	3,806,976	242,529
11	519,512	1,133,352	1,920,000	339,696	2,003,820	3,657,216	234,150
12	522,088	849,384	1,920,000	391,916	2,504,256	3,693,120	263,508
13	410,480	1,177,776	1,920,000	421,876	2,705,916	3,793,824	310,149
14	603,176	1,134,792	1,920,000	378,308	2,299,092	3,688,512	259,749
15	669,984	1,448,640	2,400,000	231,140	1,994,904	3,828,864	256,263
16	560,224	1,460,880	2,400,000	375,788	2,013,432	3,559,872	237,216
17	701,456	1,435,176	2,400,000	374,332	1,974,384	3,846,720	204,624
18	536,088	1,130,904	2,400,000	386,680	1,957,956	3,678,720	223,524
19	594,216	1,376,352	2,400,000	384,468	2,029,044	3,814,752	237,447
20	874,216	1,409,904	2,400,000	318,976	1,743,612	3,681,792	191,499
21	588,056	1,232,856	2,400,000	415,632	2,446,392	3,745,536	252,903
22	419,048	1,181,448	1,680,000	342,832	2,206,644	3,734,016	258,783
23	453,992	1,093,968	1,680,000	352,548	1,933,836	3,698,304	235,578
24	420,616	973,728	1,680,000	322,028	1,808,196	3,654,912	204,498
25	491,736	967,680	1,680,000	358,148	2,082,132	3,741,888	239,148
26	481,040	1,095,408	1,680,000	352,128	2,006,952	3,718,176	251,811
27	513,408	1,068,984	1,680,000	372,904	2,091,768	3,615,648	246,918
28	519,400	487,728	1,680,000	333,816	1,950,780	3,779,328	233,772
29	715,848	1,754,208	2,880,000	296,716	1,790,448	3,782,784	175,980
30	809,592	1,818,432	2,880,000	321,272	1,741,080	3,758,400	195,300
Total	17,433,360	35,809,272	59,760,000	10,862,124	63,822,084	112,335,168	7,366,632